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ABSTRACT

Interviews were conducted with educational leaders in seven of the Caribbean islands during August and September 1994 concerning the development of a regional Curriculum Development and Materials Production and Equipment Centre (CAMPAEC). Visits to several sites, reading of background documents, and additional research were also completed. The primary view expressed was that relevant curriculum materials at different levels of the system--at the Pre-School, Primary, Secondary, and Tertiary levels of all educational institutions--were desperately required for both teachers and students. The lack of suitable print, nonprint, and electronic curricular materials was seen to constitute a significant bottleneck to educational growth and reform in the islands, and CAMPAEC has been envisaged as an education entity with the potential to provide high quality curriculum materials and equipment at affordable costs. It was further emphasized that harmonization and standardization of the curriculum across the sub-region would be a significant step in the development, acquisition, and/or production of economically viable materials. Researchers were also told that the needs were even more acute in non-formal education, notably adult literacy and parental education. This report presents the working papers of the study, which deal with issues in the areas of management, staffing, equipment and facilities, funding and cost factors, and implementation phases and stages. A summary of the findings and 17 recommendations for the implementation of the project conclude the report, and a list of persons interviewed, a table showing comparative demographic data, and a figure outlining course production processes are appended. (Contains 32 references.) (BBM)

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Organization of Eastern Caribbean States

Education Reform Strategy

Project 4B

Feasibility Study on the Development of a Regional Curriculum Development and Materials Production and Equipment Centre

Consultants Report

by

Gerald R. Brown
Winnipeg, Manitoba, Canada

Joseph Halliday
St. Kitts, West Indies

October 1994

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INTRODUCTION

The OECS Education Reform Strategy has fostered great expectations in the hearts of educational leaders in this part of the sub-region. It gained considerable momentum from the prospect that a Curriculum Development and Materials Production and Equipment Centre strategically located within the OECS would soon become a reality. As such, CAMPAEC is considered the most feasible entity which could comprehensively impact on some of the vital pre-requisites to initiate and sustain holistic educational reforms.

This document is a compilation from the material collected from interviews of educational leaders in seven of the islands during August and September 1994. Visits to several sites, reading of background documents and additional research was also completed. The responses from the interviews were very significant in developing the feasibility study. The series of recommendations for implementation flow from this material.

The primary view expressed was that relevant curriculum materials, at different levels of the system - at the Pre-School, Primary, Secondary and Tertiary levels of all educational institutions, were desperately required for teachers and taught alike. The lack of suitable print, non-print and electronic curricula materials, constitute a significant bottle neck to education growth and reform in the islands. CAMPAEC has been envisaged as an education entity with the potentials to provide high quality curriculum materials and equipment at affordable costs. It was further emphasized that harmonization and standardization of the curriculum across the sub-region would be a significant step in the development, acquisition and/or production of economically viable materials.

The interviewees told the researchers that the needs were even more acute in non-formal education, notably adult literacy and parental education.

Regionally developed resources and training programmes would provide parents and community leaders with the skills and competencies required to make meaningful interventions into socially disruptive behaviours and attitudes, e.g. substance abuse. The regional centre therefore has an important support function to play in the TVET Project and the Distance Education Project.

The interviewees projected the benefits from the setting up of CAMPAEC to have a catalytic or synergistic effect upon the territories. Many respondents conceptualized the regional centre in terms of human resources, economic, social and political development. An abiding leitmotif was that CAMPAEC would help to strengthen regional institutions and regionalism generally, by an ongoing and systematic networking of key educational leaders.

Considerable maturity was reflected in the sub-regional approach to the resource sharing, utilisation and location of the proposed educational facility for the territories. Wherever the political leaders decide that CAMPAEC would be sited, the interviewees gave the researchers a clear message that CAMPAEC must have a pool of human resources. This cadre of trained personnel would be located both at the Centre and the periphery, and from which the constituent members could draw for development and implementation of curricula, or in the maintenance and repair of equipment. Through the regional centre, it was anticipated that there would be a materials reference and information centre component which would be networked to the national teacher centres, to teacher training institutions or other pedagogical centres. In this way a greater sharing of materials and information could be handled through the curriculum implementation processes. CAMPAEC was deemed feasible, economically viable and was

expected to be self-sustaining after the third year of operation. It was strongly urged that the regional centre have a strong educational and administrative leader who will be given freedom to apply good business practices to the operation, and will be expected to keep the services functioning efficiently and effectively.

Within the working papers of the study, there are sections dealing with management, staffing, services, job descriptions, location criteria, stages of implementation and a series of recommendations. All grow out of the data collected in the interview process, the reading of local documents, and the research that has been conducted relative to the project.

The OECS ERS Facilitator, the Governments and the funding agencies are to be commended for having the vision to bring a regional centre on stream at the earliest possible stage in the implementation of the Education Reform Strategy.

MAIN ABBREVIATIONS AND ACRONYMS

ACCC	Association of Canadian Community Colleges
AFGUND	African Fund
CAMDU	Curriculum and Materials Development Unit
CAMPAEC	Curriculum Materials Production and Equipment Centre
CARCAE	Caribbean Regional Council for Adult Education
CARICON	Caribbean Community
CARNEID	Caribbean Network for Educational Innovation for Development
CDAP	Canadian Development Assistance Programme
CDB	Caribbean Development Bank
CIDA	Canadian International Development Agency
COL	Commonwealth of Learning
CTTP	Comprehensive Teacher Training Programme
CXC	Caribbean Examination Council
ECERP	Eastern Caribbean Education Reform Project
EEC	European Economic Community
EECB	European Economic Central Bank
EMIS	Educational Management Information system
GTZ	Agency for Technical Corporation of the Government of Germany
HRD	Human Resource Development
IIEP	International Institute for Educational Planning
ILO	International Labour Organization
MAC	Management Advisory Committee
NRC	National Reform Council
OEC	OECS Education Committee
OECS	Organization of Eastern Caribbean States
OERS	OECS Education Reform Strategy
OERU	OECS Education Reform Unit

PSC	Project Steering Committee
TVET	Technical and Vocational Education and Training
UNDP	United Nations Development Programme
UNESCO	United Nations Education Scientific and Cultural Organization
USAID	United States Agency for International Development
UWI	University of the West Indies
UWIDITE	University of the West Indies Distance Education Project.

Section 1.0 PHILOSOPHICAL FRAMEWORK

The closing decades of the twentieth century have witnessed an era of scientific and technological innovations, which so far has been unprecedented in any other era of civilization. These rapid technological and scientific developments have not been without impact on our way of life whether at work, home or school. In our educational systems the potential for information storage and retrieval now possible through such scientific and technological capabilities, ought to be conceptualized as a meaningful challenge or counterpoise to a learning environment, in which children frequently find the world of television and dub music more attractive than what transpires within dull and unimaginative classrooms. It is within such a context that the conceptualization of a Curriculum Development and Materials Production and Equipment Centre, can help the member territories of the sub-region to provide a learning environment which should hopefully be more creative, innovative and attractive.

Further, the various territories of the sub-region are at different, but not outstandingly dissimilar points in the continuum of economic, social and political development. Within and across the sub-region, schools systems differ in the degree and acquaintance with modern audio, video and computer technologies. The efficiency and sophistication of use depends on the experiences, academic background and training of the teachers. As such CAMPAEC can help to bring more focus, relevance, drive, and initiative to teacher and taught alike, with discreet and appropriate teacher and pupil material: in print, non-print and electronic formats.

The commonality of needs and concerns in education, particularly the harmonization of curricula, the standardization of curricula and testing and measuring procedures, are suggestive of the type of activities which the OECS has as priorities in the upward thrust to promote equity, access and efficiency in the educational system of the region.

CAMPAEC will help each member territory and the entire sub-region more effectively achieve their material goals and aspirations. The psychological climate is ripe. In an age of large trading blocs and multi-national co-operations, notably the unity of the developing countries of Europe, unit territories are preparing to lay aside narrow insularity and unbridled nationalism for the benefits which could accrue from sub-regional initiatives like the OERU. In such initiatives CAMPAEC has a pivotal and critical role to play.

With the above and further considerations, CAMPAEC will unhesitatingly receive the blessings of the educational and political leaders of the sub-region.

Section 2. Regional Data Collection and Analysis

2.0 Investigation Process

Prior to the arrival of the research team, the OECS office faxed a memo to each island's Ministry of Education. It made specific reference to Education Reform Strategies Project 4B, which was available in all Ministry offices. It included the names of the researchers, and the time of their arrival. It was suggested that key personnel be invited to meet with the researchers. Upon arrival, the research team was given the names of people who would be available. The names of all interviewees appears in the Appendix 1. In advance of the meetings, the relevant data for the island was reviewed using the appendices to the OECS Education Reform Strategies document. A summary of this data appears in Appendix 2. An effort to achieve consistency was made by using a similar procedure with each individual interview. The following open-ended questions were posed:

1. What services would you see a regional curriculum materials production and equipment centre providing which would help you in your current role in education on this island?
2. What kinds of staff do you feel would be needed to meet the service components you have enumerated?

3.1 What kind of management structure would you see necessary to operate the regional centre effectively?

3.2 In what ways would you like to have input into the operation?

4.1 What general and specific criteria for the choice of location for the regional centre would you recommend to the decision-makers?

4.2 Now that you have set your criteria, would you please use that criteria to recommend your priority listing of three island choices?

Section 2.0 Investigation Process (Cont'd.)

5. How do you believe this regional proposal should be financed for long-term viability?
6. Please summarize your thoughts by giving your views on the feasibility of the implementation of a regional centre.

The researchers compiled detailed notes as the discussion proceeded. When background material or supporting data was presented, copies were obtained if possible. These were studied and analyzed in depth. When offers were made to visit existing sites and tour facilities, these were graciously accepted.

The hosts on each island were most helpful in trying to provide both information and opinions. This was most appreciated considering that the visits were made immediately prior to, or during school opening for the fall term.

Each evening the researchers reviewed the data collected during the day, and where possible began compiling the database for future analysis. During the last few days of the project, various sections were drafted for discussion and revision.

Section 2 Regional Data Collection and Analysis

2.1 Background Information Summary

The various territories of the sub region are at different stages in their developmental thrust in providing CURRICULUM DEVELOPMENT UNITS, TEACHER RESOURCE CENTRES, SCHOOL AND COMMUNITY PUBLIC LIBRARIES and other national entities which could provide print and non-print materials to under-pin curricula endeavours at the formal and non-formal levels. However, as a sub-region the OECS have collaborated and intensified their efforts to provide relevant curriculum materials and equipment to different levels of their education system in a cost effective manner. Such efforts notwithstanding there is a commonality of interests, concerns and a history of networking and sharing which make CAMPAEC both desirable and feasible.

To emphasize the point why it is necessary to have a centrally located CAMPAEC for the benefit of the sub-region, some brief references will be made to some of the more recent co-operative endeavours and initiatives undertaken by the sub-region often in collaboration with donor agencies and regional educational institutions. Singled out for special mention are:

1. The Primary Education Project (PEP) 1979-1984.

   The PEP project was designed to provide a measure of standard curricula and harmonization of national endeavours to provide relevant curricula in language arts, mathematics, science and social studies for the sub-region. Funded by USAID and organized by the University of the West Indies, which orchestrated curriculum specialists and leading subject specialists for the sub-region, the PEP provided useful curricula material which now

needs considerable updating and review. It was also envisaged that some of the resultant resource material, resource books, and text books to maintain these curricula endeavours would have been put into a more permanent form by IMPRINT of TRINIDAD. After a limited amount of materials were printed and distributed, the undertaking was aborted for miscellaneous reasons.

2. The ACCC/CIDA UWI Secondary Curriculum Project(1985-1988). At the Secondary Level, the Caribbean Examination Council in conjunction with the Association of Canadian Community Colleges (ACCC) and CIDA developed relevant curriculum teacher/student resource booklets to support the Examination Syllabuses principally in Chemistry, Physics, Biology and a limited number of technical and vocational subjects. These materials contributed a significant breakthrough of a bottle-neck in most territories in which teacher competence and confidence in those subject areas left very much to be desired. These materials should be revised and reprinted by CAMPAEC.

3. The MULTI-ISLAND PROJECT (1991-1993)
UNESCO/ILO assisted the sub-region with curriculum materials and an impressive range of "curriculum equipment" - overhead projectors et al, to redress the commonality of concerns that faced most member countries of the sub-region. Each nation was struggling to deal with the impoverished state of TVET education throughout the respective member territories. The project met with varying degrees of success. The indications are that it lacked any mechanism for advancement and sustainability both

at the sub-regional and national levels. Some of the materials are worthy of being salvaged, updated and reprinted.

4. The OECS/GTZ TechVoc Programme (1990-)

This initiative undertaken by some OECS territories in conjunction with GTZ, represents yet another effort in the sub-region, at a concerted attempt to deal with the perennial problem of providing school leavers through curricula initiatives, with relevant orientation and marketable skills for the world of work. As a serious and significant updated approach to the problem of TVET in the sub-region, the OECS/GTZ materials should be catalogued and documented for further development and dissemination in collaboration with Project 6 of the OECS Reform Strategy.

5. The OECS PRE VOCATIONAL EDUCATION PROJECT

Various national, regional and international reports have lamented the underfinancing, the scarcity of skilled human resources, lack of appropriate curricula material both teacher and student material for the appropriate implementation of TVET programmes in the region and sub-region. (CARICOM, 1990: OECS, 1991: World Bank Report, 1991) In this project also, very useful curricula materials have been developed, but the full potentials have not been utilized for lack of effective mechanisms for reproduction and dissemination. While the issues of TVET will constitute a separate programme/project, until that programme comes on stream, CAMPAEC should address the issue.

Further CAMPAEC should be given the responsibility of producing and reproducing curriculum materials relevant to all the projects of the OECS Reform Strategy.

6. The CTTP/OCOD Curriculum Modules (1991-)

Several territories of the sub-region have significant numbers of underqualified teachers who cannot access formal training institutions. In addition there are a number of untrained teachers who, although having the minimum entry requirement, have not yet been admitted to national Teacher Training Colleges (OECS, 1991) (OECS, 1994) Appendix 2.

The CTTP/OCOD curricula modules were designed to help the upgrading of teachers in language arts, mathematics, science and social studies. The materials are considered invaluable also in assisting school leavers and dropouts who were unable to complete their formal education in those subject areas. It is common knowledge that in the second phase of this project, the reproduction was done in CANADA, and then transported to the sub-region. In subsequent updating and revision CAMPAEC should play a major role in this reproduction.

7. Teacher Resource Material EDF/UWI 1992-

In the area of Teacher Resource material to deal with the quantum of untrained teachers in the sub-region, funding and assistance obtained through EDF and executed through UWI became pivotal in addressing an in-service training programme for secondary school teachers in the sub-region. In future reprinting of the

Secondary non-graduate Teacher Resource Material, CAMPAEC should be utilized.

8. The COL/OECS Distance Education Project (1991-__)

   This distance education project executed by Sir Arthur Lewis Community College (SALCC) for the benefit of the sub-region has developed curriculum material and resource booklets in a wide-range of Business Education subjects including Computer Programme and Language Arts. This has come as part of a desperate response to provide non-formal education to school leavers and under-qualified employees in both the public and private sector. (COL, 1993)

   CAMPAEC could help greatly in the reproduction and dissemination of these materials.

9. The IIEP/UWI Text Book Project (1994) The IIEP/UWI text book training programme sought inter alia to provide selected teachers of the sub-region through a Distance Education Programme with training for the identification and selection of cost effective text books. The materials are worthy of reproduction and wider dissemination.

10. The Humber College/Lakehead University Project (1994-__)

    This project is designed to provide training through seven modules for principals of both primary and secondary schools. The programme is so designed that other interest groups can receive relevant training by choosing only one select module (for example, module 6 could provide very meaningful upgrading and updating

for all Curriculum Development Officers.) These materials should in turn be reproduced and disseminated by CAMPAEC.

The ten examples cited above, a list by no means exhaustive, were highlighted to underscore the fact that for several decades the OECS as a sub-region has intensified its efforts to provide relevant curriculum materials and equipment in a cost effective and efficient manner.

Some of the recent studies have pointed to the undesirable state of the arts, regarding text books and school/community libraries in the sub-region (Davis 1994, World Bank, 1994).

Section 2 Regional data Collection and Analysis

2.2 Interviewee Perceptions

2.2.1 Summary of Responses

When the interviewees were invited to identify the types of materials and/or services they believed the Regional Centre could provide there was great commonality among the seven countries. The following list represents those responses.

PRINT MATERIALS

- Student text books
- Student work sheets
- Student workbooks
- Printing of standardized curricula
- Reprinting and reproducing relevant curricula material as outlined at (1-10) above
- Standardized tests
- National examinations
- The "eleven" examinations
- Achievement tests
- Teaching aids, including charts, posters, graphics, transparencies

NON PRINT MATERIALS AND EQUIPMENT

- Audiotapes
- Audio-visual aids
- Photocopiers
- Computer software
- Video cassettes
- Multi-media kits
- Slide projectors
- Cameras, both photographic and video
- Scanning Equipment
- Binding equipment
- Sorters and collators

Section 2.2.1 Summary of Responses (Cont'd.)

TYPES OF SERVICES

- Dubbing rights
- Copyrights
- Centre from which educational equipment may be borrowed/rented
- Information retrieval system
- Resource Centre for information on Curricula
- Materials Information Network retrieval system
- Data base for research on education
- Depository Centre for all types of curricula and Teacher Resource materials for examination purposes
- Resource from which skilled manpower and highly trained technicians may be hired for fixing educational equipment
- Resource Centre from which public may obtain first class printing services at cost.

Some recent studies have pointed to the undesirable state of the arts, regarding text books and school/community libraries in the sub-region (Davis 1994, World Bank, 1994)

Section 2 Regional Data Collection and Analysis

2.2.2 Perceptions of Service Needs - Summary

The officials stated that relevant curricula materials were required at all levels of the system, namely at the Pre-school, Primary, Secondary and Tertiary levels of all educational institutions. Further the view was expressed that urgent attention should be paid to the development and procurement of relevant curricula materials and equipment and especially for such target groups as Special Education; Remedial Education and Adult Literacy. Curriculum materials were required also for target groups who were particularly vulnerable such as adolescent boys and girls faced with special problems, or to attempt to address issues related to teen-age pregnancy, drug-abuse, sex-education, career education, counselling to name a few.

Inclusive of the many areas which were named top-priority consideration, and about which animated views were expressed are:

1. The Standardization and Harmonization of Curricula and Standardized Tests and Examinations.

   The majority of the officials felt that once the work of the harmonization of curricula and standardized curricula were achieved, then top priority should be accorded to CAMPAEC for printing and disseminating of standardized tests, achievement tests and standardized examinations across the sub-region.

2. Language Arts

   Concerning specific subject areas, language arts received one of the highest priority considerations. Special mention was made for the need to find suitable remedial reading programmes, promote language skills, the problems of dialect versus standard English,

and the need for articulate oral expressions. In similar contexts was the desire to have suitable curricula materials to combat the problems of illiteracy both at the formal and non formal levels (adult and continuing education).

It was therefore imperative that appropriate reading materials should be promoted and printed. The regions earlier efforts, to provide reading materials under the UNDP/UNESCO AFGUND Multi-Island Project was applauded and a follow-up project was deemed as an urgent step in the right direction.

3. Junior Secondary Schools

Curriculum materials both print and non-print were requested to be developed for junior secondary schools as well as the Forms I, II and III of all Secondary and High Schools. Such curricula activities it was noted were urgently needed, and should be properly constructed and sequenced to effect both a smooth transition and to lay a proper academic foundation from the primary schools to the Syllabuses used at the Form IV and V levels for the Caribbean Examinations Council (CXC).

4. Environmental Education/Local History/Geography

Not only individual schools within specific territories, but entire school systems across the sub-region wanted a more enriched curricula, which dealt with environmental issues. It was observed that the region was lacking in updated and sufficient curriculum materials pertaining to the flora and fauna and in general the entire ecological systems of the sub-region. Enough attention was not focussed on the birds and other animals which formed a

part of the natural habitat. Materials on marine life was sporadic, and although some territories had made efforts on particular aspects of their environment, the sub-region as a whole, had somewhat neglected environmental education.

CAMPAEC was conceptualized as a mechanism for dealing with the generic aspects of history and geography from which the sub-region could benefit, while leaving scope for the unit territories to emphasize specific aspects of the local history, geography and culture deemed necessary for national endeavours.

As such CAMPAEC was expected to play a vital role in the provision of audiotapes, and video cassettes, charts, posters, graphics, and transparencies which will foster and promote resource-based learning for both pupils and teachers of generic and sub-regional relevance.

5. The Cultural and the Aesthetic Aspects

Significant numbers of persons made reference to the relatively low interest afforded to the aesthetic aspects of the curricula. It was felt that curriculum initiatives pertaining to morals, music, art and national heroes who were to serve as role models, were important for the advancement and enrichment of our cultural heritage. Curriculum materials and teacher support modules were also requested for various aspects of sports and athletic activities.

6. Modern Languages:

In the era of regional and international co-operation, it was affirmed that modern languages in schools needed to be set on a firmer foundation. More students should be conversant with

Spanish and French for example, both because of our historical legacy and association, as well as present day communication with our Caribbean neighbours and international partners. It was further expressed that the current bookish approach to the teaching of modern languages should give way to more emphasis on audio and video tapes.

"Recapturing the ideas and methods of 'old' retired teachers" and recording them for posterity and as a legacy to inexperienced teachers" should form an integral part of the non-print educational materials voiced one of the interviewees.

7. Changing Pedagogical Methodologies and Technologies

It was observed that current pedagogical principles and practises lagged behind the present state of scientific and technological advantages which have revolutionized homes, factory and industry, the values and life-style of the current high-tech era. Consequently school life and classroom methodology tended to lack the lustre and attraction of the television programmes and the "walk-man" which more powerfully attracted children's interest. One example cited was reading and the acquisition of skills of numeracy for delinquent boys, school dropouts and remedial students. It was envisaged that the "look and say" method of our reading books, could be replaced by the look, listen and say method, made possible by appropriate computer software programmes.

Section 2.2.2 Perceptions of Service Needs - Summary (Cont'd.)

Briefly put, all persons interviewed mentioned that CAMPAEC should provide suitable audiotapes, video cassettes, computer software, and other types of non-print curricula materials. Several remarked that CAMPAEC should be a repository for examples of curriculum materials, from which network territories could make requests as the specific needs arose.

8. Information Network and Electronic Sharing

In the area of non-print material, as well as print, the territorial representatives observed that CAMPAEC should be the nerve centre for collection, storing and electronic retrieval of relevant resources on curriculum development and teaching and learning. Further CAMPAEC was conceived as a centre from which equipment, scarce human resources, or skilled man-power with professional and technical expertise could be drawn for the benefit of the sub-region.

Section 2 Regional Data Collection and Analysis

2.2 Perceptions of Service Needs - Summary

2.2.3 Perceptions of Staffing Needs

The persons interviewed in the sub-region were unanimous in the view that CAMPAEC would need a combination of permanent and temporary or part-time staff. The latter category may be contracted, seconded or hired at the different stages of the development or the delivery system of the CENTRAL UNIT. Clear signals were given that the staff should comprise administrative and professional personnel, highly skilled technicians, maintenance and clerical personnel, accountant(s) and groundsmen for the functioning and maintenance of CAMPAEC. "All the top level personnel should not be drawn from one particular island" was the sentiment frequently expressed.

Inclusive of the staffing needs as perceived by these interviewed were:

1. A Chief Administrator or manager who would be hereafter called THE DIRECTOR OF LEARNING SYSTEMS.
2. Curriculum Specialists

   It was recognized that this person though directly responsible to the Director of Learning Systems, will liaise with the Chief Curriculum and Development Officer, who will be in place under Project 4A.
3. As the needs arise, selected Subject Curriculum Specialists will be hired, contracted or appointed on a temporary basis, particularly persons with skills in evaluation and research.
4. In view of the large amount of documentation and resource materials that would be stored at CAMPAEC, it was deemed necessary to appoint a full time Material and Resources Information Specialist, or an Information Specialist according to

Section 2.2.3 Perceptions of Staffing Needs (Cont'd.)

the preferred designation.

5. It was envisaged that CAMPAEC would be the repository of high cost equipment for printing, publishing and reprographic work, and a full time officer would be required to execute the printing, production and distribution work of the system. Hence, there was need for a Production Equipment and Distribution System Co-ordinator, or any other suitable application which is deemed acceptable to OERU, and will have responsibility for the pool of support technicians, clerks, and graphic artist staff.

6. It was likely that such a person described at (5) above would need a deputy Printer Level II to staff the Printing component of the publishing and reprographic unit.

7. The interviewed persons saw the need for at least one Graphic Artist working full time, and others who may be given temporary assignments as the needs arise.

8. Audio Unit Technician

It was believed that the commercial radio stations did not pay sufficient attention to the academic learning needs of the sub-region. Consequently an Audio Unit, with a full time staff member to work closely with local radio station to develop or acquire programmes, cassettes or audiotapes for the benefit of the sub-region, was a compelling necessity.

9. Video-Technician

Similarly it was considered beneficial to appoint a staff member to acquire or produce high quality VIDEOS which would cater to the learning needs and relevant aspirations of the peoples of the sub-

region. Similarly close collaboration with local cable stations would be needed to direct more curriculum oriented materials and literacy materials to the homes. CAMPAEC would seek DUBBING or COPYRIGHT for those audio or video productions which the unit hopes to reproduce.

10. Computer Specialist

The officials of the region, generally were anxious that the learning benefits to be accrued by the invention of the silicon chip vis-a-vis the computer be translated into a more common educational experience of the students of the sub-region. It was envisaged that a computer specialist be appointed full time who would work closely with the Curriculum Specialist, to acquire, produce, or modify appropriate software according to their relevance and utility to the subject areas.

11. Technicians

All of the persons interviewed saw the need for a combination of highly technical skilled persons, as well as lower qualified technicians which would operate as a team to carry out sophisticated repair and maintenance work and simple routine maintenance work as the circumstances so dictate.

12. Marketing and Distribution Co-ordinator

It was expected that CAMPAEC would eventually be income-generating . ! self-supporting. The ability of the unit to market and distribute its goods and services must, therefore, have an enabling capacity. It was considered necessary to appoint a marketing and distribution co-ordinator full time, with appropriate support clerical and utility staff members.

Section 2 Regional Data Collection and Analysis

2.2 Perceptions of Service Needs - Summary

2.2.4 PERCEPTIONS OF THE MANAGEMENT STRUCTURE

The respondents were unanimous in their perception that CAMPAEC should be an autonomous entity directly responsible through the OECS Education Facilitator to the Director General of the OECS and ultimately to the Council of the Ministers of Education.

All the respondents were also specific that CAMPAEC should have both Management and Advisory Committee. They saw such a Committee consisting of:

1. A chairperson who should be duly elected from among its members.
2. A Secretary, who should be "person-to-holder" the Director of Learning Systems

Other members of the Advisory Committee may be selected from

3. A representative of the OERU.
4. Ministerial Representation or Government Representative by a high profile Educational Personnel such as a Permanent Secretary.
5. High Profile Professional personnel inclusive of a Chief Education Officer.
6. A representative from such groups as National Curriculum Unit, Teachers Resource Centre, CATVET, etc.
7. A representative of School Principals: Primary and/or Secondary.
8. Teacher representative through a Teachers Union or Professional Association.
9. Representative of Donor Agencies.
10. Representative of "Parent" Organization

Section 2.2.4 Perceptions of the Management Structure (Cont'd.)

11. Representative from technical college or teacher education institution.

It is not expected that the Board will be unwieldly, or that there would be unnecessary expenditure in transporting persons and hotel accommodation. There are creative and innovative ways of doing this without such expenditures.

It is very important that the principal stakeholders have great visibility and contribute to the decision-making processes of CAMPAEC.

The Committee/Advisory Management approach was frequently stressed. In differing tones the respondents said that:

1. "the professional integrity of the Unit must be maintained"
2. "no one territory should assume control"
3. "as a regional organization it should be free from political interference by manipulation."

CAMPAEC was expected to promote and maintain linkages with educational institutions who had particular interest in Curriculum Development. Inclusive of such institutions are CXC, UWI, CATVET, National Teacher Resource Centres, and Curriculum Units at the territorial level.

It was generally perceived that such linkages would have both formal and informal management structures. Linkages were the life-blood of the CAMPAEC, if it is to have relevance, focus and usefulness in its operations.

Section 2.2.4 Perceptions of the Management Structure (Cont'd.)

However, managerial procedures have to be enacted for production, goods and services, which require financial outlay. Clear indications of appropriate "cost recovery" must be committed before work is executed.

Following the suggestions from the interviewees, details of the responsibilities for each department head and related technician and support staff have been prepared and are found in Section 5 of this report.

The clerical, accounting, and other support staff were to be given job descriptions, and likewise specific guide-lines in the chain of command.

The management structure of CAMPAEC should allow at all times for the training and upgrading of its staff. Incentives with clearly enunciated rules or conditions of service, were seen as pre-requisites of a considerate Management Structure, which expected a high profile of responsibility, accountability and commitment from its staff.

Section 2.2.5: Funding and Cost Factors

FINANCING AND SUSTAINABILITY OF CAMPAEC

CAMPAEC is estimated to cost initially E.C. $1.2 million disaggregated as follows:

Building	$ 750,000.00
Materials Equipment	500,000.00
Annual Staff Salaries	300,000.00
Annual Recurrent non-salary costs	100,000.00
Staff Training	100,000.00
Technical assistance (2 years)	700,000.00

The view was strongly expressed that the initial capital expenditure, the cost of materials and equipment as well as salaries for staff represent a considerable educational investment by which the host country stands to benefit optimally.

It was thus considered a moral obligation of the country in which CAMPAEC will be located to consider concessional arrangements for the fledgling institution, considering the spin-off benefits which will more than compensate the host country.

Such concessionary grants could go a long way towards underpinning the sustainability of CAMPAEC, long after project funding has been exhausted. Inclusive of such concessionary considerations which have been cited are:

1. grant of land, buildings
2. exemption of export duty on equipment et al for CAMPAEC
3. secondment of staff, with full salary for short periods of time
4. deduction of cost for, or free use of electricity and water.

Section 2.2.5 Funding and Cost Factors (Cont'd.)

Other considerations which are prudent for the host country might include affordable housing arrangements for staff on secondment.

The Management Structure has stipulated chain of command to ensure strict fiscal accountability, as it is expected that most of the activities will be cost-recovery and income generating. It has been documented in OECS (1994) that:

"With well over 100,000 students...annual revenue from the sale of materials at a modest cost of $20.00 per student is $2 million."

Additionally the competitive cost at which CAMPAEC should produce materials, should encourage more students/parents and sponsors to purchase more educational materials than is currently practised in the sub-region. Thus $2 millions seem a conservative estimate of the gross income which should accrue from the sale of educational materials.

The governments of the sub-region should recommend or initiate funding from donor agencies on behalf of CAMPAEC, through such mechanisms as LOME, UNESCO, OAS and USAID grants.

CAMPAEC is envisaged as a mechanism that will considerably reduce the flight of scarce capital from the sub-region to traditional international booksellers and agencies. It is expected to be an important foreign exchange earner. Further, it would lessen the brain-drain, since it will afford opportunities for highly skilled personnel to find some degree of financial and professional fulfilment within the sub-region.

The majority of persons interviewed saw CAMPAEC as providing high quality material at affordable costs, in which quality is not sacrificed expediently for quantity.

Section 2.2.5 Funding and Cost Factors (Cont'd.)

Income generating activities were further recommended by the marketing to the private sector of the high level of skilled technician and maintenance personnel which CAMPAEC will train for its institutional purposes.

It is believed that while working in collaboration with the private sector, some private sector and governmental jobs of a selected nature may well be done at CAMPAEC, and thus further ensure its financial viability.

1. DEVELOPMENTAL PERSPECTIVES

Two broad perspectives, couched in differing language appeared to have emerged from the various persons interviewed concerning the criteria to be utilized for selecting the site for CAMPAEC. These viewpoints may be summarized thus:

1.1 There were those who argued that territories with the resources, readiness, expertise and relevant experiences should be accorded first priority in the selection process.

1.2 On the other hand there were those who contended that such countries with the "critical mass of resource, expertise, experience and readiness in terms of infrastructure development, were already in an advantageous position, and the location of CAMPAEC in such territories will give an additional advantage to these territories for further sub-regional considerations.

1.3 The view was also expressed that, in terms of the Reform Strategy, deliberate attempts should be made to share across differing territories the institutions, units or centres which are likely to come on stream, as agencies or vehicles to drive the Reform Strategy forward.

1.4 The alternative view was that agencies or institutions of the Reform Strategy should be placed in the same island to maximize the potential for collaboration and management.

Section 2.2.6 Criteria for Selection of the Site for CAMPAEC (Cont'd.)

1.5 It was argued that the sustainability of the Unit, depended upon its location in a site sufficiently developed to provide the back-up services which are required for its operation and survival.

1.6 The alternative view was that the location of the centre should be seen as an enabling capacity for territories, less endowed, and that locating CAMPAEC is such territories would have a catalytic/multiplier effect/synergistic effect, and by impacting positively on the territories would in turn ensure the availability of the services, and resources necessary for the maintenance and survival of CAMPAEC.

2. ACCESS

2.1 The island should be strategically located to facilitate easy movement of goods, services, and expertise.

2.2 The island should be endowed with appropriate airport facilities, preferably with an International Airport.

2.3 The island should have a good harbour with adequate berthing facilities, to facilitate bulk shipping.

2.4 Accessible roads, and a suitable network of roads to facilitate movement of goods, services and expertise within the specific country.

3. INFRASTRUCTURE

3.1 Reputable and reliable electrical services

3.2 Reputable and reliable supply of drinking water

3.3 Adequate housing facilities at reasonable cost to accommodate influx of professionals, technicians and administrative staff.

4. HUMAN RESOURCES

4.1 A pool of Human Resources on which CAMPAEC can draw as temporary or part time staff.

4.2 A cadre of trained or trainable people for maintenance, repair and technical work.

4.3 A cadre of persons working in institutions on the island, on which CAMPAEC can rely for training persons, or trouble-shooting in cases of technical or mechanical breakdown.

4.4 The presence of persons on the island with experience in working on Curriculum Development and Resource Centres.

5. POLITICAL STABILITY AND STRONG GOVERNMENT SUPPORT

5.1 The country should have a reputation of being politically stable.

5.2 Strong indication of government support to regional organizations.

5.3 A commitment from government to support CAMPAEC with certain concessions.

Such concessions would include outright donations or concessionary terms for: (i) land (ii) electricity (iii) water supply (iv) existing buildings, (v) structures which could be modified or renovated.

Section 2.2.6 Criteria for Selection of the Site for CAMPAEC (Cont'd.)

6. ECONOMIC/FINANCIAL STABILITY AND SUPPORT

While it was expected that the operations of CAMPAEC would be cost recovery and self-sustaining in the long run, it was envisaged that CAMPAEC would be placed in an environment of economic and financial stability which were also conclusive to its survival and maintenance.

During the interviews, each individual was invited to share his/her perceptions on the criteria for the location of the centre. As reported earlier, the discussions were open and frank. The criteria were both general and specific. In the light of these discussions, individuals were then asked to list in order of priorities the three (3) islands that they felt matched the criteria. Some people chose to name only one or two islands. Others offered many more suggestions.

In tabulating the results, only the top three choices were used. They were weighted with first priority at five points; second at three points, and third at one point. The choices of all persons interviewed for each island were weighted and tabulated. The total weighted ratings were then divided by the number of respondents. This was done to give each island one vote. Using this process, in the final tabulation, the maximum total an island could achieve would be 35 points (7 first priorities of 5 points each).

The following chart shows the distribution of points and the ranking.

Responding Country Priorities									
Location	Dominica	Montserrat	St. Kitts	Antigua	St. Lucia	Grenada	St. Vincent	Total	Rank
Dominica	3.75							3.75	7
Montserrat		4.3						4.3	6
St. Kitts			4.0	1.57	.67	1.50		8.6	3
Antigua		.86	1.2	5	1.67			9.7	2
St. Lucia				2.85	5	2.50	1.0	12.6	1
Grenada						3.25	1.8	6.05	4
St. Vincent							4.6	4.6	5

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Section 2.2.6 Criteria for Selection of the Site for CAMPAEC (Cont'd.)

One needs observe that each island's respondents had some strong desire to have the regional centre. However, conscience decisions were made in terms of the criteria.

This data is provided to guide decisions. The decision-makers are encouraged to consider the summary of the choice for location selection material.

The researchers concur with the data. It is supported by information compiled in this visitation process.

It was observed that there were 12 projects written for the OECS reform strategy. No single territory should benefit disproportionately from the total number of reform projects. Further that the OECS as a sub-region has demonstrated considerable maturity in arriving at consensus for the siting of regional organizations/ entities and institutions and that the same guiding principles of sharing across territories would be given the utmost consideration in the selection of the site for CAMPAEC.

Section 2 Regional Data Collection and Analysis
2.2 Interview Perceptions
2.2.7 Perceptions of the "Feasibility" of CAMPAEC

It is very significant to observe that the respondents considered the issue of feasibility from a variety of perspectives. These responses could be conveniently grouped under the following sub-headings:

1. Financial Perspectives
   - 1.1 "The unit should provide high quality text at affordable cost".
   - 1.2 "It will give us high quality transparencies and other teaching aids - that individual countries cannot afford".
   - 1.3 "There will be considerable savings in the cost of printing materials by the avoidance of unnecessary duplication".
2. Human Resource Development Perspective
   - 2.1 "It will generate an enabling capacity in the territories by the sharing of skilled personnel between one island and another."
   - 2.2 "The secondment of high level professionals would give individuals the personal satisfaction of working in another territory."
   - 2.3 It would provide the advisory services of top level professional and highly skilled technical people and services to small territories who could not retain such on a permanent basis.
3. Educational Perspectives
   - 3.1 "Such a unit is crucial for the development of education in the sub-region."

Section 2.2.7 Feasibility (Cont'd.)

3.2 "Education is the key to national development, and such a central unit will greatly improve education in the islands."

3.3 "A unit of the type proposed and centrally located will complement curriculum development at the territorial level."

3.4 Teaching skills will be greatly improved as videos of "professional" teachers can be seen in different territories.

4. Cultural Perspectives

4.1 "The Unit will help each island with the exchange of cultural materials.

5. Regional Integration Perspectives

5.1 "A central Curriculum Production Unit will foster linkages between the central unit and national curriculum centres."

5.2 "It will strengthen the regional integration movement by helping people to work together for a common cause."

5.3 "It will provide information about data base and research skills about the different islands of the sub-regions."

6. Economic Development Perspectives

6.1 "A Central Curriculum Development and Production Unit will keep scarce financial resources in the sub-region. We would not have to pay people outside the sub-region to develop curriculum materials for us."

6.2 "The Unit could sell its service as a foreign exchange earner".

6.3 "It will help lessen the brain-drain as skilled professionals and technicians will have opportunities to stay in the sub-region."

6.4 "The region will have a cadre of highly skilled technicians."

Section 2.2.7 Feasibility

6.5 "It will enhance the capacity to use modern technology in education."

7. Miscellaneous

7.1 Some respondents simply said "this is a good idea"; "it should have been thought of a long time ago" "I think it is feasible" "I support the idea".

In brief it is important that the reader perceives the feasibility of CAMPAEC, not in merely economic and financial terms, but for the broader benefits of educational, cultural, integration and human resource development perspectives.

Section 3 Scope of Regional Centre Services

3.1 Objectives of the Curriculum Materials Production and Equipment Centre

Inclusive of the Objectives of the Curriculum Materials Production and Equipment Centre (CAMPAEC) will be:

1. To collaborate with the Curriculum Development and Implementation Unit Agencies and Organizations involved in Curriculum Development in each of the territories.
2. To liaise with national Teacher Resource Centres, and existing materials production units.
3. To document available curriculum development material within each member territory and across the sub-region.
4. To collect curriculum development material from Curriculum Development units and Resource Centres at the national and sub-regional level.
5. To establish an effective information network of curriculum resource materials across/for the benefit of the national territories and the sub-region.
6. To evaluate available curriculum materials for the benefit of member territories and the sub-region in general.
7. To reproduce relevant curriculum material available in member territories for the benefit of other territories.
8. To assist member territories with the production and reproduction of curriculum materials.

Section 3.1 Objectives (Cont'd.)

9. To produce curriculum materials for the benefit of member territories and the sub-region as a whole.
10. To market curriculum materials at a cost affordable to each member territory, its teachers, students and parents.
11. To ensure adequate publicity is given to all available curriculum development materials, equipment and services at CAMPAEC.
12. To obtain copyright clearances for relevant curriculum development materials to be utilized and disseminated within the sub-region.
13. To provide technical support to curriculum development efforts at the national level.
14. To repair and maintain the equipment utilized at CAMPAEC.
15. To facilitate member territories of the sub-region with high quality production and reproduction of curriculum materials.
16. To strengthen national capabilities with the production and reproduction of curriculum materials by relevant training programmes at CAMPAEC.
17. To advise national units and Resource Centres on the quality and cost of audio, video and electronic materials and equipment available on the market.
18. To provide technical expertise and advice in the repair installation and maintenance of equipment at the national level.
19. To initiate and document information on the research work across the sub-region and through CAMPAEC

20. To strengthen the capability of the sub-region in its thrust for the harmonization of curricula initiatives and the standardization of testing and measurement activities by the production and reproduction of materials.
21. To establish a self-sustaining Curriculum Materials and Production and Equipment Centre in the sub-region.
22. To maintain management and curriculum development Advisory Committees to ensure that CAMPAEC is relevant to regional and national needs, and that it is operated in an effective and efficient manner.

Section 3. Scope of Regional Centre Services
3.2 Relations to Other Centres/Agencies

Through discussion with the educational leaders it became clearer that there were strong collaborative links between the service components for the Regional Centre (CAMPAEC), for the National Curriculum/Teacher Resource Centres, and for the School/Community/Public Libraries.

It was noted that not all territories had a Curriculum Centre, or a Teacher Resource Centre, but that all had some aspects of the service somewhere in their Ministry of Education. It was further observed that some territories have drafted applications to the World Bank and other agencies to initiate such facilities. The clarification of the roles for regional and national services is important.

Similarly a wide variation in school library development was reported (See Appendix 3). Likewise World Bank applications in this context were read. There appears to be a strong movement to combine school and community library services at the Ministry level. Therefore, the perceptions of this curriculum development support component were addressed as well.

The following chart evolved from these discussions of relationship at the three levels of service for curriculum development service providers.

Relationships Between CDU Service Providers

Categories	Regional Centre	National Curriculum/ Teacher Resource Centres	School and Community Libraries
Staffing	• Curriculum Development Specialists • Curriculum Officers • Material Resources and Information Services Staff • Production Staff • Technical expertise • Clerical support	• Curriculum Officers • Local production Staff • Equipment Service Staff • Clerical support	• Teacher-librarian • Library Technical Assistants
Collections	• Media for evaluation for: teacher use, student use • Electronic access to resources • Materials Information Network	• Expensive kits and resources for teachers • Teacher reference materials • Locally produced materials • Modules • Lesson Plans	• Teacher resources • Adult collections • Student curriculum support materials • Free reading and information materials • Electronic resources • Adult literacy materials • Media Resources/Kits • Parent resource collections
Equipment	• Copy and dubbing services • Media production facilities • Media Equipment Repair and Maintenance	• Copy services • Duplicators (Short runs) • Back-up AV Equipment for schools • Local production equipment • Manipulati	• AV equipment for teacher use • Computers for student use • Production equipment - copiers, duplicators

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Section 3 Scope of Regional Centre Services
3.2 Relations to other Centres/Agencies

Relationships Between CDU Service Providers

Categories	Regional Centre	National Curriculum/ Teacher Resource Centres	School and Community Libraries
Services	* Needs Assessment * Media Production * Printing and Publishing * Training and Evaluation	* Prioritizing local needs * Promotion of regional and local productions * Backup equipment * Equipment repair services	* Student skill development programs * Curriculum materials for Resource-Based Learning * Reference and Information Services * Materials circulation systems * Literature Appreciation Programs * Literacy tools for use at all levels
Spaces	* Conferences * Workshops * Services * Administration Offices * Professional Staff Offices * Materials Resources and Information Centre * Production Centre Units (6)	* Administration and Staff Offices and Work Space * Conference Services * Workshop * Collection storage, use and Circulation * Equipment for loan * Equipment Repair Centre	* Storage for School and Community Collections * Student work areas * Teacher Resource Collections * Teacher Production Space * Equipment Storage * Reference and Information Space * Library administration and workspace * Bookmobile Space

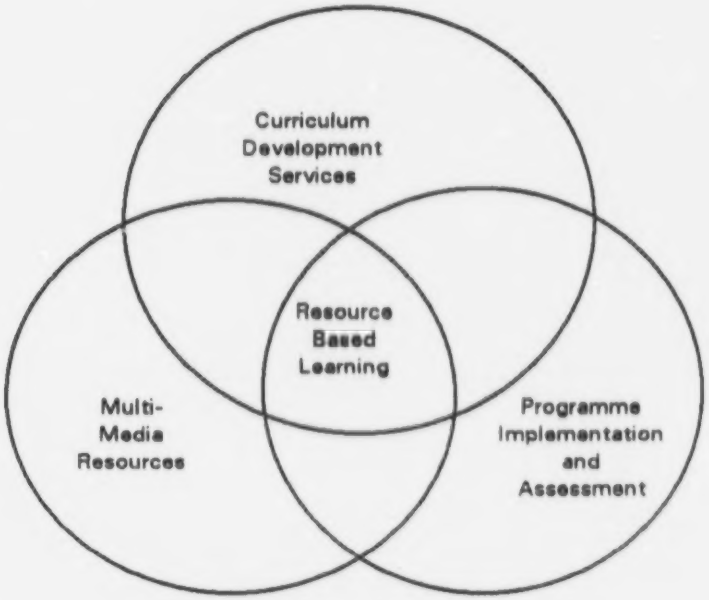
Section 3.2.1 Resource Based Learning

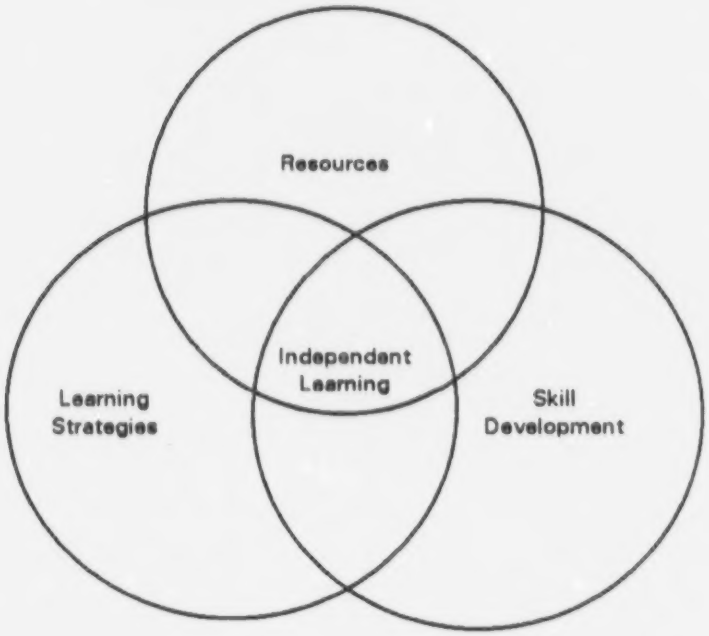
Germaine to the discussion of teacher training, staff development and resources acquisition, was the perception of developing independent learners. It was appreciated that this is a long term goal, and that the projected three units at a Regional Centre (CAMPAEC) - could be powerful forces to reach this goal.

The following diagrams were drawn to illustrate the interrelatedness of these concepts, and to emphasize that all three units must move in tandem. In fact, one was reminded that as each circle evolves it provides a synergy for the movement in other directions. The recycling of curriculum development facilitates maturation.

Section 3

3.2.1 Resource Based Learning





Section 4. Management Structure

4.1 Introduction

Having reviewed the perceptions on structure and organization in section 2.2.4, and considering the various staffing needs, the next logical step was to develop a chart showing the staff and line relationships in the proposed regional centre.

In the information from the field, it was quite clear that this new agency needs to "stand on its own feet" with clear reporting lines to the OECS Secretariat. While it is resident in one country, it has responsibility through the Director-General to all governments. At the same time, the agency must have flexibility to make decisions and take actions within broad policy parameters to meet specific operational needs. It is proposed that the leadership of this agency be named Director of Learning Systems to encompass the broad concept of learning in the 21st century, and with the advantages of modern technologies and teaching-learning strategies. It is further proposed that this individual will have the authority to operate all aspects of the programme including its fiscal operations and accountability within a budget provided through the offices of the Director of the Education Reform Unit. It is urged that when this position is filled the candidate will have demonstrated strong leadership skills, an assertive management style, and fine communication skills. A good sense of both education principles, theory and practice combined with business entrepreneurship skills would be valuable.

The Director of Learning Systems must have the confidence to draw strong leaders and models to operate the three (3) components:

Curriculum Development and Implementation; Materials Resource and Information Services. Each individual must have a strong commitment to education within the region, as well as to staff training for all who work under their direction or in collaboration with them. This must be a team effort; there is no room for bureaucrats or prima donnas. There is a major task ahead, and everyone must pull full weight.

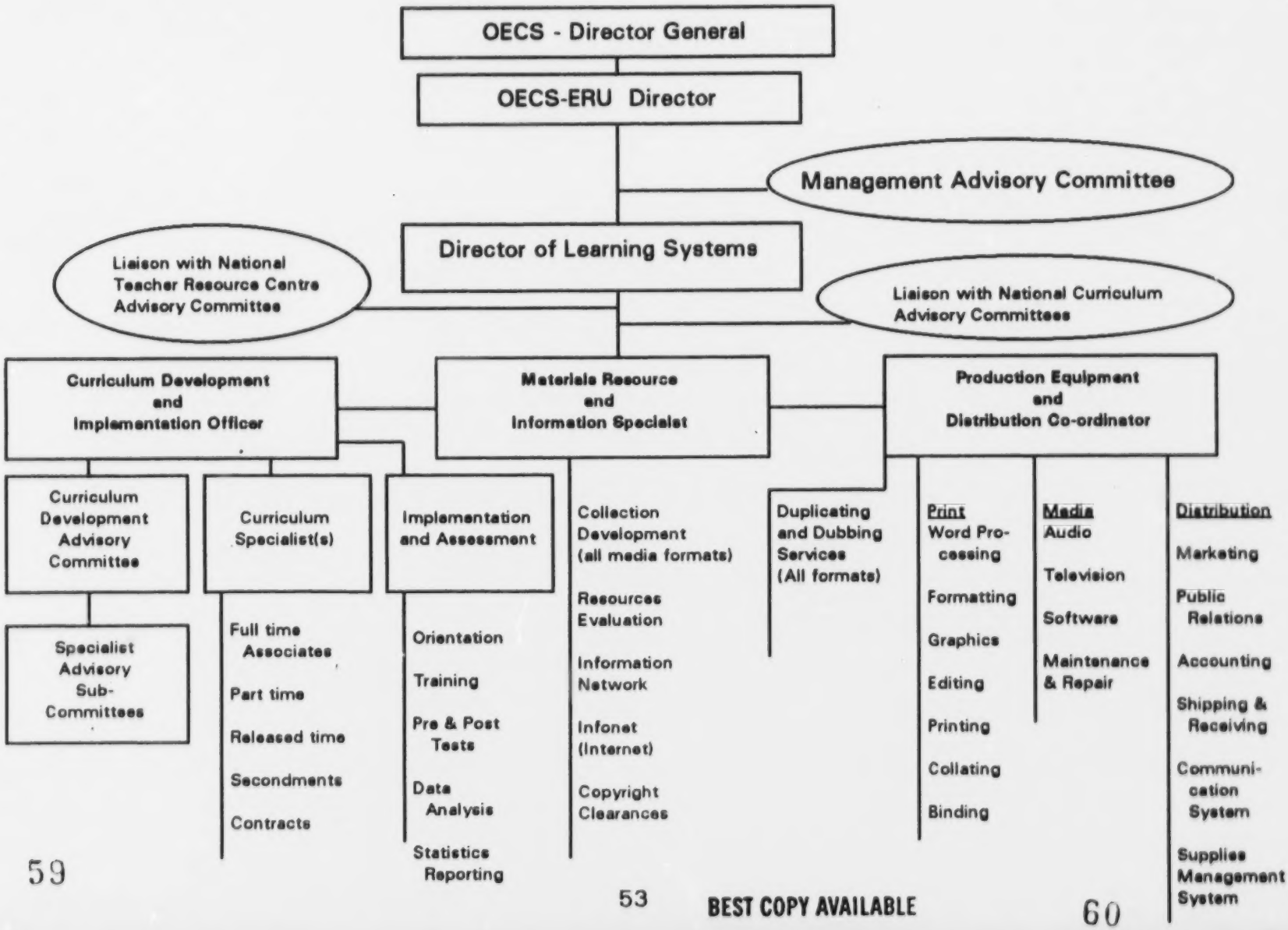
In Section 5 of this document, the responsibilities for most of the staff are clearly laid out. The reporting relationships and supervisory roles are suggested as well.

The Reporting Relationships Model Chart which follows shows the relationships within the centre. All lines flow in both directions. For units to function well individuals must take responsibility for communicating with each other openly and freely.

The role of the Management Advisory Committee (4.3) follows the chart. This committee is the most significant feedback mechanism to the Director and staff. It should be used to its maximum to promote the services of the Regional Centre to all agencies represented. Creative input should be sought to encourage growth and financial sustainability. Likewise it has a role in monitoring and evaluating the whole system with the Director.

Other Advisory Committees have important roles to play. Their scope has been left to the Director or unit heads to work out as the Centre takes root and matures.

Section 4 Management Structures
4.2 Reporting Relationships Model



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4.3 MANAGEMENT ADVISORY COMMITTEE

Composition to include representation from:

OERU
Minister of Education/Permanent Secretaries - Territories
National Teacher Resource Centres Directors
National Curriculum Implementation Specialists Group
Regional Curriculum Development and Implementation Officer
Materials Reference and Information Specialist
Production Equipment and Distribution Co-ordinator
Principals or Headmasters
Teacher(s) - Secondary
Teacher(s) - Primary
Technical and Teacher Education Institution-Heads/Faculty
Parent and/or business community

Chair: Elected/Named by the group
Secretary: Director of Learning Systems Services

Responsibilities:

1. To provide direct feedback on the effectiveness of the agency, with respect to
   1.1 Areas of priority of need for production with respect to curriculum initiation, program implementation, and materials production
   1.2 Quantity of productions
   1.3 Quality of productions
   1.4 Accessibility of services
   1.5 Relevance of initiatives
2. To review the management policies and practices of the agency, and offer suggestions or alternatives as appropriate.
3. To monitor the various accountability factors relative to the scope of the operations, eg.
   - Staff effectiveness
   - Fiscal responsibilities
   - Procedures and handbook currency
   - Public relations and communications

Section 4.3 MANAGEMENT ADVISORY COMMITTEE (Cont'd.)

4. To annually review with the Director and staff the:
   - Long range goals
   - Specific objectives
   - Strategies or Plans of action
   - Performance Criteria
   - Levels of achievement

5. To respond to any other matters where the OERU Director and Director of Learning Systems believe input would be appropriate.

Frequency:

The Committee should meet at least three times per year, with agenda and working papers distributed in advance.

In cases where a Committee member is unable to attend, an alternate should be named by the Committee member (or the responsible body), and that person should attend with observer status.

Reporting:

- Copies of all minutes should be for the public record, and available on request.
- The copies of all reports developed from working papers should be distributed as public documents.
- All committee members should be encouraged to discuss all policy matters with the group they represent, and to report back to them on a regular basis.

Section 5: Staffing Considerations

5.1 Introduction

As has been implied in several sections up to this point, the staffing of a Regional Centre requires very careful selection of appropriate personnel. Positions should be widely advertised to draw the best people from across all the Islands, and abroad as appropriate. It is critical that these opportunities be considered as part of the career structure or mobility path. One must ensure that individuals are not penalized within their own territory from access to positions or from pensionable service time and funds for choosing to work at the Regional level.

The Services Relationships Model (5.2) outlines some of the levels of basic services for an effective operational unit. Important liaisons must be established with National Advisory Committees (which may still have to be facilitated). Likewise the communication among the three (3) units themselves is critical. There are clear functional relationship paths which logically flow out of this combination of services. When they are in close proximity they synergize each other.

The Director is responsible for establishing the staff and line relationships, and for setting a model for open communications and reporting.

Section 5 provides a preliminary set of job descriptions which could be used to set up the operation. They are based on interviewee feedback, existing operations within the Islands, and consultative experience in related operations elsewhere. Classifications and salary scales may have been omitted, except when clearly similar positions were identified in local government schedules. The job descriptions are arranged in sequence from left to right in the model. This does not imply prioritization, but rather one of working relationships.

Section 5 Staffing Considerations
5.2 Services Relationships Model

Position Title: DIRECTOR OF LEARNING SYSTEMS

Term of Office: Full time
Classification:

Qualifications

1. Graduate degree in education, M.Ed. or PhD.
2. Classroom and administrative experience, 4-7 years.
3. Demonstrated experience in curriculum design, implementation and assessment.
4. Demonstrated effective use of modern electronic communication technologies.

Responsibilities:

1. Co-ordinate the programs and projects of the Curriculum Specialist Support Staff; Materials Reference and Information Services Specialist; and the Production Equipment and Distribution Co-ordinator.
2. Annually enunciate and evaluate the specific objectives of the agency and its components, including strategies of implementation, specific plans of action, and methods of on-going evaluation of both summative and statistical natures.
3. Ensure that the management structure clearly delineates the chains of authority, roles and responsibilities of the various members, and reporting relationships.
4. Develop models of communication and articulation that will integrate the work of the three units into an efficient and effective agency in close collaboration with relevant national centres or advisory groups.
5. Develop a high profile for the agency regionally, nationally and internationally to acquire financial support for projects; to identify resources and personnel of high calibre to work in/or with the centre, and to command respect for the quality of the programs and products of the centre.
6. Maintain a fiscal management system and inventory control system that is accountable to the OECS/ERU, and available for audit on an annual basis, or as necessary by external auditors.
7. Develop Management and Advisory Committees to maintain a close interface with the client community at all levels.
8. Report on a regular and consistent basis to the sponsoring agency respecting operational goals, stages of implementation, and matters of initiative and on-going activities.

Reports to: OECS/ERU Director
Supervises: All Staff
Salary and Benefits:

Section 5.3 Job Descriptions

Position title: CURRICULUM SPECIALIST OFFICER

Term of Office: Full time

Classification:

Qualifications:

1. Graduate degree in Education - B.Ed, or M.Ed.
2. Classroom experience at both primary and secondary levels.
3. Demonstrated leadership ability.
4. Good communication and facilitator skills.
5. Demonstrated knowledge and experience in using emerging electronic technologies in education.
6. Demonstrated training and staff development competencies, especially in adult education.

Responsibilities:

1. Collaborate with territory curriculum development personnel to clarify and priorize needs across the region.

2. Develop plans of action to develop proposals to respond to the above needs, including scope of projects, personnel, resources and time lines.

3. Work closely with the Materials Resources and Information Specialist to:
   - 3.1 acquire existing national materials,
   - 3.2 identify, acquire and evaluate materials outside the region which may be relevant to the regional and national priorities,
   - 3.3 maintain a database about materials that should be drawn to teachers attention,
   - 3.4 assist in promoting the materials information database to all educators in the region.

4. Work closely with the Production Equipment and Distribution Specialist to:
   - 4.1 priorize printing projects to integrate with implementation plans in a feasible and practical way,
   - 4.2 provide long range production plans to assist in best utilization of technical and support staff,
   - 4.3 promote the effective use of the Centre's services, equipment, facilities and staff,
   - 4.4 design educational product assessment tools, techniques, and strategies to evaluate the success of the Centre's products and services,
   - 4.5 provide feedback formally and informally, to enhance the quality of service using a Management by Objectives model, or similar approach,
   - 4.6 provide information for marketing, sales and distribution of productions prior to, and during production and implementation stages.

Section 5.3
Curriculum Specialist Officer (Cont'd.)

5. Chair a Curriculum Development Advisory Committee composed of regional, national, and classroom educators to monitor and facilitate the work of the office.

6. Form Specialist Advisory Sub Committees to:
   - 6.1 provide input to the Regional Committee,
   - 6.2 draft working documents in particular content areas,
   - 6.3 evaluate existing resources, and make recommendations for their replication,
   - 6.4 monitor and critique new draft curricula, teacher resource materials, student materials, etc.,
   - 6.5 assist in implementation of training programs,
   - 6.6 promote/facilitate articulation in content and process across the grades,
   - 6.7 encourage integration in content and process across the curriculum programmes.

7. Recruit curriculum development personnel to work on projects on various time basis: full time, part time, released-time, secondments or contractually; and to supervise their performance and production.

8. Plan and carry out curriculum implementation training and follow-up workshops collaboratively with national leaders.

9. Facilitate the formal and informal assessment of all curriculum development projects operated by the Centre, including
   - degree of implementation
   - success of the program
   - availability of resources
   - quality, quantity and relevance of regionally produced materials
   - access to resources by classroom teachers
   - use of resources in the classrooms

10. Maintain a watchful eye on the trends in curriculum development internationally and relate them to local, national and regional needs and personnel.

11. Perform other duties as may be assigned by the Director from time to time.

Reports to:
Director, Curriculum and Information Services

Supervises:
Full or Part-time Specialist Staff (as assigned)
Clerical staff

Salary and Benefits:

Section 5.3 Job Descriptions

Position Title: INFORMATION SPECIALIST * (IS)

Term of Office: Full time

Classification:

Qualifications:

1. Graduate degree in Education - B.Ed, or M.Ed.
2. Advanced study in Librarianship, Information Science and Technology .
3. Good communication skills - both oral and written.
4. Demonstrated experience in using emerging technologies in education and for information retrieval.
5. Classroom teaching experience at both primary and secondary school levels.

Responsibilities:

1. Develop a collection development plan in collaboration with the Director and Curriculum Specialist to respond to the projected scope of the project.

2. Develop an implementation plan of action to put the processes for the collection development plan in phases, including time schedules, and financial/cost estimates.

3. Make recommendations for acquiring and using current information and electronic technologies appropriate to the success of the unit.

4. Work closely with the Curriculum Specialist and Territory counterparts to:
   - 4.1 acquire existing national curriculum materials,
   - 4.2 identify, acquire and evaluate materials from outside the region which may be relevant to the curriculum development priorities of the unit,
   - 4.3 develop an Information Network using both print and electronic tools to maximize access to all clients in the region,
   - 4.4 develop publicity and public relations tools and devices to familiarize clients with the scope of resources and services in the Materials Reference and Information Centre.

5. Collaborate with the Production Manager and staff to:
   - 5.1 document, store, and circulate copies of all new productions from the unit.
   - 5.2 maintain archival copies of all new publication and products,
   - 5.2 facilitate documenting publications and production in copyright/depository centres in each territory and internationally as appropriate,
   - 5.4 assist in obtaining copyright clearance for new productions in the region.

6. Develop an informational material access and retrieval system to facilitate efficient and effective use of resources, both on site and in other locations

Section 5.3 Job Descriptions
Information Specialist (Cont'd.)

7. Activate document delivery systems appropriate to both manual and electronic access needs, including off island services.

8. Collaborate with national Teacher Resource Centres to differentiate services, and to mutually support each others goals.

9. Provide feedback, formally and informally, to enhance the quality of the service unit.

10. Assist with training programmes in relation to curriculum implementation:
    - 10.1 awareness of resources
    - 10.2 use of electronic technologies
    - 10.3 integration of learning resources in the planning and instructional modes
    - 10.4 training for subject-content/process area consultants and committee members.

11. Report regularly and systematically to the Director using both long and short term goals, strategic action plans, performance criteria and other methods on:
    - 11.1 collection development
    - 11.2 service units and functions
    - 11.3 programmes of materials integration and utilization
    - 11.4 resource centre personnel performance
    - 11.5 training programs
    - 11.6 and others as appropriate

12. Ensure that the Materials Reference and Information Services Unit functions efficiently and effectively.

13. Develop a professional development plan to ensure that all MRIS staff are kept aware of programmes, processes, activities and events that would keep them at the cutting edge of information services developments.

14. Perform other duties as may be assigned by the Director from time to time.

Reports to: Director, Curriculum and Information Services

Supervises: Library Technical Assistant
Clerical Staff

Salary & Benefits: $27,000 to $30,000 EC

* **Alternate titles for this position that were considered included:**
- Materials Information Specialist (MIS)
- Materials and Resources Information Specialist (MRIS)
- Materials Specialist (MS)
- Materials Co-ordinator (MC)
- Library and Information Specialist (LIS)

Section 5.3 Job Descriptions

Position title: CO-ORDINATOR, PRODUCTION EQUIPMENT AND DISTRIBUTION SYSTEMS * (PEDS)

Term of Office: Full time

Classification:

Qualifications:

1. Training and/or experience in the fields of Printing, Media Production and Marketing.
2. Managerial training and experience in co-ordinating a diverse team of specialists.
3. Interpersonal and communication skills to deal with a broad range of clients.
4. Assertiveness to maintain principles, policies and protocols under pressure
5. Task oriented team leader.
6. Commitment to the field of education.
7. A good sense of business practices.

Responsibilities:

1. Coordinate the work of specialist and technical personnel in the areas of:
   - 1.1 Publishing and Reprographic Unit
   - 1.2 Audio Unit
   - 1.3 Video Unit
   - 1.4 Computer Software Unit
   - 1.5 Equipment Maintenance and Repair Unit
   - 1.6 Marketing and Distribution Unit

2. Develop management plans for each unit in response to the production priorities determined in collaboration with
   - Management Committee
   - Advisory Committees to the Director
   - Curriculum Specialist

3. Develop systems to supervise and evaluate each unit to ensure quality service in an economical and efficient manner.

4. Ensure there is an open, supportive and positive communication process in place in the unit, through regular team meetings, commendations, and appropriate feedback.

Section 5.3
Co-ordinator, Production Equipment & Distribution Systems (PEDS) * (Cont'd.)

5. Prepare regular reports for the Director using accepted Management by Objective procedures - both formally and informally - with recommendations to improve/maintain the effectiveness and efficiency of the unit.

Reports to: 1. Director of Learning Systems

Supervises: Unit heads,
Support Staff.

Salary & Benefits: $22,000 - 25,000 EC

* **Alternate titles for this position that were considered included:**
  - Production Manager and Equipment Specialist (PMES)
  - Production, Equipment and Distribution Specialist (PEDS)
  - Production and Equipment Manager (PEM)

Section 5.3 Job Descriptions

PUBLISHING AND REPROGRAPHIC UNIT

Position Title: HEAD PRINTER II

Term of Office: Full time

Classification: Printing Technician II

Qualifications:

1. Graduate from CXC Examinations completed Form VI
2. Experience in the printing industry including work with offset press (AB Dick, Addressograph, etc.) and in repair and maintenance of same.
3. Able to use, and train others with collating, folding, stitching and binding and laminating equipment.
4. Communication skills appropriate to negotiate external prices and services anywhere in the region.
5. Reliable, assertive and a hard worker willing to be a model to the staff.

Responsibilities:

1. Co-ordinate and schedule reprinting of camera ready originals/copies as provided:
   - short runs on copier(s) (less than 50 copies)
   - long runs on duplicator(s) (more than 50 copies)

2. Ensure that the printing equipment produces a quality product that is easily ready, and efficiently completed and dispatched.

3. Work closely with Centre Staff to generate or use graphics and illustrations from:
   - clip art subscription services
   - graphics artist productions
   - computer generated graphics
   - mechanical tool assisted visuals, such as stencils, blocks, sign makers
   - photographic originals

4. Complete collating, folding, stapling and packaging according to each job's specifications sheet

Section 5.3
Head Printer II (Cont'd.)

5. Complete bindery processes, including plastic bind, wire bind, staples; or contracts out the final stages according to each job's specifications sheet.

6. Negotiate external contracts for specialized services such as book binding, oversize chart printing, colour printing.

7. Complete laminating services as necessary for publications, or as a contract service for schools or individuals.

8. Maintain supplies inventory and production records, including costing for accounting and auditing procedures.

9. Ensure that two (2) copies of all original Centre creations or authorized reprints are placed on deposit in the Archives Section, and with the Information Specialist.

10. Ensure that all publications carry a clear imprint of publication authority and distribution information to corroborate copyright ownership and/or permission.

11. Follow standard routines of document production as outlined (see Appendix 4) and ensure that job specification sheets are developed to enable a flow from one stage to another systematically and efficiently.

12. Work closely with the Co-ordinator to schedule proper workflows and to ensure that supplies are on hand to meet project needs.

13. Keep aware of changes in printing technology and supplies to ensure currency in the production unit, and advise the co-ordinator accordingly to develop budget plans.

14. Use photographic 35 mm. cameras to capture necessary visuals for production, according to planned publications and job specifications

15. Arrange for economical off-site developing of all black and white negatives.

Section 5.3
Head Printer II (Cont'd.)

16. Report regularly to the Co-ordinator, (PEDS) using accepted Management by Objectives procedures - both formally and informally - with recommendations to improve/maintain the effectiveness and efficiency of the service unit.

17. Perform other duties as may be required by the Co-ordinator (PEDS) from time to time.

Reports to: Co-ordinator, Production, Equipment and Distribution (PEDS)

Supervises:

Graphics Artist (Full time)
Photographer (Part time)
Printing Technician I
Collator

Salary and Benefits: $21,000 - 26,000 EC

Position Title: GRAPHICS ARTIST

Term of Office: Full time

Qualifications:

1. Graduate from CxC Examinations completed Form VI
2. Pursued post graduate studies in Fine Arts, Design and Graphics Production - preferably with a Bachelor of Fine Arts Degree.
3. Demonstrated understanding of the principles of education and learning theory - preferably having worked as a classroom teacher.
4. Demonstrated portfolio of creative art and graphics appropriate to the development of educational materials.
5. Experienced in using computer technology to generate graphics for printed publication, displays and video productions.
6. Evidence of ability to display, informational materials effectively.

Responsibilities:

1. Advise on layout and formatting of all materials.

2. Prepare illustrations for publications in consultation with the writers and sponsors.

3. Do graphics work for centre publications in collaboration with the Director and the Marketing Unit.

4. Produce graphics or other visuals for video productions.

5. Prepare work schedules for all graphics or illustration related projects with the Co-ordinator.

6. Assist in preparing print material for publication, eg. some proofreading.

7. Do photographic work as necessary to enhance a publication.

8. Assist the Curriculum Specialist in developing training materials for implementation sessions.

Section 5.3
Graphics Artist (Cont'd.)

9. Participate with the Curriculum Specialist in doing workshops on graphics, lettering, formatting, transparency production for teachers.

10. Acquire commercially available clip-art services or subscriptions for use in the centre.

11. Make recommendations for computer software programmes that can be acquired to produce illustrations more effectively.

12. Maintain files of graphics created in the system for future use.

13. Compile statistical information on services and costs as necessary for the use of the co-ordinator.

14. Work closely with the printer, or other production specialists to ensure that a high standard of quality is maintained in all jobs.

Reports to: Co-ordinator, Production, Equipment and Distribution (PEDS) Unit

Supervises:

Salary and Benefits $20,000 - 24,000 EC

Position Title: PRINTING TECHNICIAN I

Term of Office: Full time

Classification: Printing Technician I

Qualifications:

1. Graduate from CxC Examinations completing Form VI.
2. Experience using high speed duplicators and color photocopiers
3. Experience working with offset presses, collators, folding machines, stitching and binding machines and laminating equipment.
4. Good communication skills - both orally and in writing.

Responsibilities:

1. Work with the Printer II to ensure production schedules are met.

2. Ensure that high quality print goods are produced.

3. Plan for a systematic flow in the printing production process by organizing the movement of materials quickly and easily.

4. Check all job specification sheets for accuracy and completeness in processes.

5. With the back-up of the Equipment Repair Technician, endeavour to keep all machines in peak operating condition.

6. Maintain a clean, neat and orderly work environment.

7. Collaborate with Marketing and Distribution Unit to see that materials are properly dispatched upon completion.

8. Supervise both manual and mechanical collating to ensure accuracy of product and efficiency of operation.

9. See that the proper binding is done for the materials.

Section 5.3
Printing Technician I (Cont'd.)

10. Report regularly to the Printer II with statistical records to show production services, and with recommendations for improvement or to maintain existing services.

11. Ensure that sufficient kinds and quantity of printing stock is on hand to complete projected projects.

12. Keep aware of changes in printing technology and supplies to ensure currency in the production unit, and advise the co-ordinator accordingly to involve budget plans.

13. See that laminating may be completed as necessary.

14. Perform other tasks from time to time as assigned by the Co-ordinator, PEDS or by Printer II.

Reports to: Co-ordinator, Production Equipment and Distribution (PEDS)

Supervises:

Assistant Printing Technician
Collator
Laminating Clerk

Salary and Benefits: $16,000 - 21,000 EC.

Section 5.3 Job Descriptions

Position Title: AUDIO UNIT TECHNICIAN

Responsibilities

1. Record simple on-site events, programs, etc. to develop a file of local, national or regional cultural and historic resources.

2. Capture audio from distribution network in response to needs identified by the Curriculum Specialist and/or Information Specialist.

3. Obtain permission(s)/copyright clearances/royalty rights for dubbing existing materials for distribution to national Teacher Resource Centres and Schools.

4. Maintain records of all dubbing services, including archival copies for future use.

5. Publicize information about audio resources available from the Materials Information Centre, and through the Distribution Unit.

6. Assist individuals in learning how to do their own personal taping or to accompany slide or filmstrip productions for educational purposes.

7. Develop/or access commercially available sound studio facilities for producing quality audio resources for special needs, eg.
   - Visually impaired students
   - Music Specialists
   - Video production sound effects

8. Maintain a schedule of production services, with proper and accountable records of costs for services and supplies.

Audio Unit Technician (Cont'd.)

9. Work closely with the Curriculum Specialist and the Co-ordinator of the Production Equipment and Distribution Unit to survey and assess the viability of:
   - a local radio broadcast service
   - time slot over public station
   - studio for broadcast quality production to be located in a technical college, with related training component and maintenance service functions
   - versus the flexibility of tape dubbing and distribution

10. Perform duties in collaboration with the Equipment Unit to set up sound systems for seminars, workshops, conferences, public meetings, presentations and performances; to ensure quality sound presentation; and to record same according to Production Unit priorities and budget.

11. Maintain the sound recording and reproduction equipment in good working order.

12. Report regularly to the Co-ordinator (PEDS) using accepted Management by Objectives procedures - both formally and informally - with recommendations to improve-maintain the effectiveness and efficiency of the service unit.

13. Perform other duties as may be required by the Production Equipment and Distribution systems (PEDS) Co-ordinator from time to time.

Reports to: Co-ordinator, Production, Equipment and Distribution Unit

Supervises: _____

Salary and Benefits: $20,400 - 23,900 EC

Section 5.3 Job Descriptions

Position Title: VIDEO UNIT TECHNICIAN II

Responsibilities:

1. Produce quality reproductions/dubs of video from existing collections in the territories and region for which copyright clearance can be assured, on request for education purposes.

2. Produce video tapes of regional presentations or performances at conferences, workshops, services etc. for which copyright clearances have been obtained in support of the Curriculum Specialist and other educational leaders.

3. Maintain, in collaboration with the Information Specialist, one archival copy, and at least one copy for public access of all educational video tapes prepared by the unit, and ensure that these materials are documented in the regional Materials Information Network.

4. Collaborate with the Marketing Unit to ensure that information respecting all video tapes for educational purposes are distributed widely within the region.

5. Prepare a proposal to investigate the feasibility of:
   - using national public access television services to produce local and/or regional video resources,
   - collecting relevant cost data to compare these services with renting time on private/commercial stations,
   - establishing a quality regional production unit,
   - assisting in the development of a broadcast quality video production unit in a Technical College, with committed time for the Regional Unit production.

6. Work closely with the Curriculum Specialist and Information Specialist to identify commercially prepared video materials to meet curriculum resources priorities; to acquire the materials for evaluation to negotiate distribution rights for the region to arrange to have the dubbing and distribution completed with budget and service schedules and priorities.

Section 5.3
Video Unit Technician II (Cont'd.)

7. Assist in training programmes for teachers and education leaders across the region in areas of:
   - video production
   - curriculum implementation and media integration
   - teaching methodologies
   - media utilization

8. Advise personnel at national and school levels on aspects of:
   - equipment acquisition
   - equipment utilization
   - maintenance and repair

9. Maintain schedules for production and distribution in consultation with the Curriculum Specialist, and in line with the priorities established for the unit for curriculum and materials development and implementation.

10. Work closely with the Equipment Unit to set up video recording systems for conferences, services, workshops, etc. to ensure quality production; and to produce same according to the Production Unit priorities and budget.

11. Report regularly to the Co-ordinator of PEDS using Management by Objectives procedures - both formally and informally - with recommendations to improve/maintain the effectiveness and efficiency of the unit.

12. Ensure that the television production and dubbing equipment is maintained in good working order.

13. Manage the Unit with proper inventory and accounting procedures acceptable to the Co-ordinator.

14. Perform other duties as may be required from time to time by the PEDS Co-ordinator.

Reports to: Co-ordinator, Production, Equipment and Distribution Unit

Supervises: Video Production Assistant I

Salary and Benefits $20,400 - 23,900 EC

Section 5.3 Job Descriptions

Position Title: COMPUTER SOFTWARE TECHNICIAN

Responsibilities:

1. Work closely with the Curriculum Specialist and the Information Specialist to:
   - .1 locate and identify curriculum software currently in the region used for both administrative and instructional purposes
   - .2 identify, in relation to curriculum needs commercially available software that could be acquired for evaluation
   - .3 assist in negotiating dubbing agreements to allow for distribution of relevant software both individually and networked within the region.

2. Contract/complete software modifications or revisions, with appropriate agreements, to meet regional and/or national needs.

3. Monitor field-testing of new and revised software with formal evaluations retained for reference purposes.

4. Assist Information Specialist to document software resources in the Materials Information Centre and on the Information Network, and in the dissemination of this information widely in the region.

5. Assist in the orientation and training of educational leaders in:
   .1 operating of computers and network systems,
   .2 becoming aware of resources,
   .3 integrating of computer software into curricular contexts,
   .4 developing computer labs, networked computer stations, and stand alone systems for both teacher and student use.

6. Maintain a current awareness of changes in the technology and software, and show that knowledge appropriately.

7. Collaborate with the Equipment Unit in such areas as:
   .1 wiring schemes for labs and networks
   .2 arranging for equipment for demonstrations and training sessions
   .3 monitoring and recommending changes in equipment and software.

Section 5.3
Computer Software Technician (Cont'd.)

8. Maintain proper inventory and accounting of supplies, equipment, software and fiscal matters related to the unit.

9 Report regularly to the Co-ordinator, PEDS using accepted Management by Objective procedures - both formally and informally - with recommendations to improve/maintain the effectiveness and efficiency of the service unit.

10 Perform other duties as may be assigned by the Co-ordinator PEDS from time to time.

Reports to: Co-ordinator, Production Equipment and Distribution Unit (PEDS)

Supervises: _____

Salary and Benefits: $20,400 - 23,900 EC

Section 5.3 Job Descriptions

Position Title: EQUIPMENT MAINTENANCE AND REPAIR TECHNICIAN

Responsibilities:

1. Ensure that all equipment operated by the CAMPAEC unit is in proper working condition, and performs regular and systematic preventative maintenance.

2. Train individuals and/or groups in the effective and efficient use of all Centre equipment, including basic maintenance procedures.

3. Assist Centre personnel, and related committees in setting up equipment for meetings, programs, etc., and ensure that the equipment functions properly.
(P.S. see 5.2 above; individuals are expected to operate the equipment themselves once trained).

4. Facilitate rental and delivery of equipment needed, but not owned, for special events or projects with the budgets for the occasion.

5. Test new models and types of equipment, and develop standardized specifications for recommendation across the region; and distribute this information on request to territory offices and directly to schools.

6. Assist other members of the Production Unit Team as needed in demonstrations, productions, inventory and related activities within the Unit priorities.

7. Train and assist colleagues/counterparts working in the National Teacher Resource Centres on request and as time permits

8. Travel, as time permits, to do maintenance and preventative maintenance across the region.

9. Negotiate maintenance contracts and/or services across the region for all types of equipment to obtain the best service for the best price (This could merit a feasibility study first).

Section 5.3
Equipment Maintenance and Repair Technician (Cont.d)

10. Under the PEDS Co-ordinator's direction, contract/conduct a feasibility study on regional tendering for bulk purchasing of equipment and supplies for the territories.

11. Assist the Information Specialist in installing and maintaining an automated library information system in-house, and networked across the region.

12. Maintain a basic inventory of repair tools, parts and supplies to meet Centre needs; and develop a network to obtain parts quickly and economically.

13. Collaborate with the Computer Software Unit in evaluating and installing computer labs and related networks in schools and within the region.

14. Maintain schedules, records of service; and accounting for equipment, supplies and parts costs for regular Centre audits.

15. Report regularly to the Co-ordinator, PEDS using accepted Management by Objective procedures - both formally and informally - with recommendations to improve/maintain the effectiveness of the service unit.

16. Perform other duties as may be assigned by the Co-ordinator, PEDS from time to time.

Reports to: Co-ordinator, Production Equipment and Distribution Unit (PEDS)

Supervises: ____

Salary and Benefits: $20,400 - 23,900 EC

Section 5.3 Job Descriptions

Position Title: MARKETING AND DISTRIBUTION UNIT

Responsibilities:

1. Develop with the Co-ordinator, PEDS and all others in the unit a marketing strategy for creating a public awareness of the
   - Centre as an Educational Agency
   - Programmes and Services offered by the Centre
   - Materials (in all formats) available from the Centre

2. Carry out the public relations and other functions necessary to implement the marketing strategy

3. Supervise the accounting and auditing functions for proper management of the Centre, under the supervision of the Director.

4. Monitor the communication systems within the Centre to ensure effective and efficient relations with all clients and to present a positive public image.

5. Implement a simple, but effective, supplies management system to ensure proper inventory control, to avoid unnecessary wastage, and obtain resources quickly when needed.

6. Supervise a Shipping-Receiving unit to ensure that:
   - all items received are distributed promptly,
   - items being sent out are accurately labelled or tagged,
   - items are appropriately packaged for distribution,
   - the most efficient and economical methods are used to distribute materials from the Centre,
   - records are maintained to account for items sent from the Centre, (and especially upon receipt at National Teacher Resource Centres or equipment units).

7. Develop schedules for visitors, tours, etc. to the centre, and plan/share the itinerary with other system personnel

Section 5.3
Marketing and Distribution Unit (Cont'd.)

8. Report regularly to the Co-ordinator, PEDS using accepted Management by Objectives procedures - both formally and informally - with recommendations to improve/maintain the effectiveness of the unit.

9. Perform other duties as may be assigned from time to time by the Co-ordinator, PEDS.

Reports to: Co-ordinator, Production and Equipment Distribution (PEDS) Unit

Supervises:
- Accounting clerks (Part-time)
- Receptionist
- Shipper-Receiver
- Driver

Salary and Benefits: $20,400 - 23,900 EC

Section 5.4

STAFFING GRID

Service Component	No. of Staff Professional		Technical	Clerical	Cost in EC $
	Edn. Bkgd.	Other than Edn. Bkg.			
Director	1				
Secretary				1	$ 45,000
CDU	1			1	30,000
MRIC	1		1	1	45,000
PEDS Co-ordinator		1			170,000
Graphics		1			
Printing			2	3	
Audio			1		
Video			1		
Computer Software			1		
E.R.M.s			1		
Marketing		1			
Distribution				1	
Reception				1	
Custodial and Plant Maintenance					10,000
Staff training (in-house and external)					100,000
Total					$ 400,000
To be achieved during year III					21

Section 5.5

STAFFING TRAINING CONSIDERATIONS

In order to establish a Centre with a strong working team, some elements of staff training and development merit consideration. Whether this can be done by the recruited staff, or contracted out will be determined by the Director.

1. All professional and technical staff, and some secretarial and clerical positions need to be trained on the use of the networked computer programs in the system.
2. Graphic artist may need orientation to the two recommended computer software programmes.
3. All managerial level staff should have a clear understanding of Management by Objectives theory and practise to be able to put the process in place immediately.
4. Information Specialist may need orientation and assistance with implementing the automated information storage and retrieval package recommended.
5. Professional, technical and some support staff need to be introduced to protocols and procedures for using Internet.
6. All staff need an opportunity to become familiar with the networked telephone system so that they can be positive public relations people in their phone communications.

Section 5.5 (Cont'd.)

7. Operation and scope of services with the fax machine need to be understood by direct users, including the Receptionist and the Director's Secretary.

8. Specialist training courses of varying lengths will be needed by:
   - Equipment Repair Technician
   - Photocopier and Duplicator Key Operators
   - Audio, Video and Computer personnel

   Many of these programmes/courses could be negotiated at the time equipment, software, or service contracts are required.

9. Others, as may be determined internally as the system evolves, and moves to keep current with changing technology and service needs.

6. EQUIPMENT AND FURNISHINGS REQUIREMENTS

6.1 Introduction and General Considerations

In order to arrive at an estimated cost to equip such a centre for operation, it has been necessary to consider each unit in some detail. All cost estimates were based on Canadian catalogues and/or sources in St. Lucia. Prices may vary considerably from place to place, and from time to time.

General considerations have been summarized first to set a framework for the relationship of all units in the Centre, and with a client perspective in mind.

Since some decisions respecting numbers of staff (eg. Curriculum Development Unit) will depend on the direction and speed of implementation, the related costs are incomplete.

Costs respecting the Materials Reference and Information Centre have been provided more globally since this unit requires special considerations for design and implementation detail.

A partial summary of the costs itemized is provided herewith:

SERVICE UNIT	ESTIMATED EQUIPMENT & FURNISHINGS COST
Director & Secretary, incl. computer system	$ 42,390.00
CURRICULUM DEVELOPMENT UNIT	6,380.00
MATERIALS REFERENCE & INFORMATION UNIT	67,000.00
PRODUCTION, EQUIPMENT & MAINTENANCE UNIT	
Co-ordinator	1,660.00
Print Services Graphics Section	271781.00
Graphics Section	5,365.00
Audio Unit	2,100.00
Video Unit	5,600.00
Computer Software Unit	1,250.00
Equipment Repair & Maintenance Unit	6,590.00
Marketing & Distribution Unit (incl. Reception , Shipping)	3,920.00
Estimated Total	$414,036.00 Can $

Section 6: Equipment and Furnishings (Cont'd.)

6.1 GENERAL CONSIDERATIONS FOR ALL UNITS.

1. Telephone system, operated through receptionist and central switchboard, with the options:
   - for direct dialing out from any location
   - for inter-office communications and call transfer.

2. FAX services to and from one central area either at Reception or with the Director's Secretary.

3. Network for computer operations linking all services in the centre, with authorized passwords for the Director's files and for accounting operations. Recommend Novell network system; and the following software packages: Wordperfect 6.1, Simply Accounting, Word for Windows, Excel for Windows.

4. Standardized computer services across the Centre, although some operations may access certain software more often than others do.

5. Air conditioning; proper air circulation and exhaust systems from copiers and where cleaning chemicals are used/stored; appropriate ventilation in all spaces; humidity control in special archive storage areas.

6. Lighting appropriate to the work station, and with special attention to intensity and glare in word processing areas:
   - graphics production areas
   - television production areas.

7. Reliable electric power supply, with sufficient outlets to accommodate specific work stations, and with power surge protection at all computer outlets.

8. Acoustic carpeting and/or tile to ensure that noise levels are acceptable in specific function areas. The juxtaposition of service units should be considered here also, to avoid unnecessary and distracting noise transfer.

Section 6: Equipment and Furnishings (Cont'd.)
6.1 Introduction and General Considerations

9. Curtains or blinds to darken areas for proper media utilization must be provided, especially in seminar, conference, workrooms and meeting spaces.

10. Storage for personal clothing and effects close to the work station is desirable whether in individual lockers, cupboards etc. or secured in the Staff Room Area.

11. Adequate rest room/ lavatory facilities to accommodate staff and visitors/clients, keeping meeting room needs in mind; and separately for male and female persons.

12. Display boards and cabinets strategically placed for both public and staff information, including some secured display cases for valuable/non-consumable items.

13. Aesthetics considerations through the tasteful use of wall coverings, graphics, carpet colors, fabric textures and good design to improve the atmosphere for both workers and clients.

14. Security factors, including:
- one major entrance/exit for public,
- deliveries to a workstation and/or loading dock,
- visual control,
- staff, when building is used out of regular hours for meetings, production,
- service areas that may have restricted access to the general public, eg. print duplicating services; equipment repair, workbench(es); equipment storage: supplies storage,
- well planned internal traffic patterns for efficient movement of personnel and resources.

15. Respect for Workplace Health and Safety requirements and codes regarding:
- proper heights for work stations eg. computer keyboards and screens,
- counter for standing work,
- proper back supports on chairs and stools,
- portable tables, chairs, carts as needed,
- mechanical assistance for transferring heavy items.

Section 6: Equipment and Furnishings (Cont'd.)
6.1 Introduction and General Considerations

16. Standard Office allocation to include — Estimated Price Canadian

1. Executive desk including
   table 60" w x 30" d
   bridge 17" d x 42" w
   credenza 20" d x 60" w
   complete with two box drawers
   one file drawer (accepts hanging files)
   full modest panels
   sturdy table support pole
   durable floor glides
   various colors. — $ 280.00

2. Task chair, with oversize seat and back cushions with contoured foam. Ergonomically styled loop arms. Manual adjustment of back height and seat depth. Durable floor glides.
   Various colors. — $ 129.00

3. Adjustable Secretary Chair
   Contoured seat and back
   Manual adjustment
   Durable floor glides — $ 40.00

4. Guest/Conference Chair
   Swivel/tilt control
   Height adjustment
   Metal base & durable glides — $140.00

5. Book shelf storage units, complete with
   Oak or walnut finish
   3 standard adjustable shelves
   Height 48"
   Width 36"
   Depth 11 3/4" — $ 70.00

6. Metal filing cabinet - Legal size
   Four drawers
   Width 18 1/4"
   Depth 26 1/2" — $ 229.00

Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
Director	Office Furniture, including			
	- desk	1	$ 280.00	$ 280.00
	- chair	1	130.00	130.00
	- guest chairs (4)	4	140.00	560.00
	- conference table1		150.00	150.00
	- storage shelves	1	70.00	70.00
	- file cabinet storage	1	230.00	230.00
	- secretarial desk		280.00	280.00
	- chair	1	40.00	40.00
	- storage shelves	1	70.00	70.00
	- supplies cupboard	1	230.00	230.00
	- desk supplies	Various	350.00	350.00
	- computers, network & printer		40,000.00	40,000.00
	Estimated Total:			$42,390.00
C.D.U.	Office Furniture, including			
	- desk	1	250.00	250.00
	- chair	1	120.00	120.00
	- guest chairs (2)	2	140.00	280.00
	- work/meeting table 36" x 60"	1	600.00	600.00
	- chairs (2)	2	140.00	280.00
	- storage shelves	1	70.00	70.00
	- filing cabinet storage	1	230.00	230.00
	Office furniture as above (except for table & chairs) for each subject specialist and contract staff.		___.	___.
	Estimated Total:			$ 1,830.00

Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
C D Unit Seminar, Workshop, Conference Space	Folding tables (30" x 96")	10	$ 70.00	$ 700.00
	Folding tables (30" x 60")	3	50.00	150.00
	Chairs, Stacking	50	30.00	1,500.00
	Chalkboard (4' x 6')	4	150.00	600.00
	Easel/Flipchart (Tripod, portable)	2	220.00	440.00
	Project Screen, Pull Down (70" x 70")	2	180.00	360.00
	Podium/Lecturnette	1	550.00	550.00
	Desk supplies	Various	250.00	250.00
	Estimated Total			$ 6380.00
MRIC	Office Furnishings: see Director (only 2 chairs)		1,000.00	1,000.00
	Secretarial workstation see Director		1,000.00	1,000.00
	Details need to be submitted when an Information Specialist has been hired, and the space designs and layout taken into consideration.		65,000.00	65,000.00
	Estimated Total			$67,000.00
Production Unit Co-ordinator	Office Furnishings; see Director (except 2 chairs)			$ 990.00 670.00
	Secretarial Work Station see Director			
Printing Unit	High Speed Photocopy Duplicator c/w collator, stapler (e.g. Xerox 5380)	3		140,000.00*
	Office Copier (e.g. Xerox Model 5334)	1		13,000.00
	Laser Color Copier (e.g. Xerox 5765)	1		42,500.00*

* Purchase, Lease, or rent options.

Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
	Offset Press (Addressograph, Hamada 665CDM or A B Dyck)	1	$36,000.00	$36,000.00
	Sorter/collator Standart Setmatic 8	1	5,800.00	5,800.00
	Electrostatic Desktop Platemaker (Elefax PM50)	1	10,500.00	10,500.00
	Folder, table top model	1	6,000.00	6,000.00
	Stitcher (Bostich Model 19))	1	5,000.00	5,000.00
	Scanner - full page	1	700.00	700.00
	Scanner - hand held	1	300.00	300.00
	Heavy duty stapler Industrial, side & saddle (Model Salco R106 Gangster)	1	1,000.00	1,000.00
	Manual	1	150.00	150.00
	Long reach	1	60.00	60.00
	Office/desk	1	5.00	5.00
	Wall gun	1	16.00	16.00
	Staple remover, standard	10	1.50	15.00
	heavy duty	1	20.00	20.00
	Staples		50.00	50.00
	Paper punches Industrial Drill (Model ChallengeJF)	1	3,000.00	3,000.00
	Desk, 3 hole adjustable	1	40.00	40.00
	Paper cutters Guillotine (Michael Business Machines	1	2,500.00	2,500.00
	Trimmer 24"	1	225.00	225.00
	Scissors	10	5.00	50.00

Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
	Laminator			
	18" multiseal roll (Model Ledco Premier III)	1	$ 2,200.00	$ 2,200.00
	Supplies;			
	Film 12" roll of 500'	10	50.00	500.00
	Film 18" roll of 500'	10	75.00	750.00
	Plastic binding machine			
	Punch & binder	1	500.00	500.00
	Supplies - Various sizes		500.00	500.00
	Tape dispensers	2	75.00	150.00
	Paper Stock			
	Copy paper for copy machines (recycled)		$ ___	$ ___
	Copy paper for printers (recycled)		$ ___	$ ___
	Colored printing/copy paper		$ ___	$ ___
	Cover stock paper			
	Desk supplies		250.00	250.00
	Estimated Total:			$ 273,441.00

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Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
Graphics Section				
	Computer software Ventura Publishing Version 4.2	1	$ 1,000.00	$ 1,000.00
	Arts & Letters Version 3.12Graphics edition for Windows	1	2,000.00	2,000.00
	Drafting table & stool	1 unit	250.00	250.00
	Knives & Cutting Tools and Mats	Various	50.00	50.00
	Moveable Studio Organizer - five drawers on castors	1	150.00	150.00
	Drafting tools	Various	100.00	100.00
	Templates and shapes	Various	100.00	100.00
	Art & Drafting Accessories	Various	200.00	200.00
	Lighting - Swing Arm Lamp (Halogen)	1	65.00	65.00
	Office furniture (standard list) Desk, Chair, Filing Cabinet, Storage shelves	1 each	700.00	700.00
	Paper stock	Various	200.00	200.00
	Desk supplies (e.g. scissors stapler, glue, tape, clips, file folders, tacks, markers stamp pads	Various	250.00	250.00
	Label Making Machine	1	150.00	150.00
	Supplies	Various	150.00	150.00
	Estimated Total			$ 5,365.00

Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
Audio Unit	Office Furniture (standard list) Desk, Chair, Filing Cabinets, Storage Units	1 each	$ 700.00	$ 700.00
	Office and Desk supplies	Various	200.00	200.00
	Califone Multi-Use Cassette Player/Recorder	1	260.00	260.00
	MPC Heavy-Duty Cassette Recorder/Player, with extra speaker with built in capacity to duplicate	1	190.00	190.00
	Telex Copyette Duplicator	1	600.00	600.00
	Equipment Cleaning Supplies	Various	50.00	50.00
	Tape duplicating supples 30 - 60-90 min tapes	Various	2.00	100.00
	Estimated Total			$ 2,100.00
Video Unit	Office Furniture (standard list) Desk, Chair, Filing Cabinets, Storage Units	1 each	$700.00	$ 700.00
	Office and Desk supplies	Various	200.00	200.00
	Video Cassette Recording Supplies VHS format 30 - 60 minutes	Various	10.00	500.00

Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
Video Unit (Cont'd.)	Panasonic Video Camera/ Recorder	1	$ 1,500.00	$ 1,500.00
	Panasonic Video Cassette Recorder, c/w remote control unit	1	600.00	600.00
	Video Character Generator	1	700.00	700.00
	Accessories; microphones, cables, adapter, batteries	Various	300.00	300.00
	Panasonic Video Stereo Monitor/TV Receiver 25" color, c/w remote control	1	900.00	$ 900.00
	Tripod, for mounting Camcorder	1	200.00	$ 200.00
	Estimated Total			$ 5,600.00
Computer Software Unit	Office Furniture (standard list) Desk, Chair, Filing Cabinets, Storage Units	1 each	$ 700.00	$ 700.00
	Office and Desk supplies	Various	200.00	200.00
	Accessories and supplies incl. blank diskettes power surge protector, power bars, cables	Various	350.00	350.00
	Estimated Total			$ 1,250.00

Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
Equipment Repair & Maintenance Unit	Office Furniture (standard list) Desk, Chair, Filing Cabinets, Storage Units	1 each	$ 700.00	$ 700.00
	Office and Desk supplies	Various	200.00	200.00
	Heavy Duty Repair Work Bench (Local construction)	1	300.00	300.00
	Workbench Movable Chair (e.g. architects chair)	1	250.00	250.00
	Repair Tool Kit (according to technicians need & skills e.g. wrenches, screw drivers pliers, soldering iron	Various	300.00	300.00
	Small parts for repair inventory based on experience with equipment in the system	Various	1,000.00	1,000.00
	Beseler Overhead projector for centre use c/w roll film attachment and replacement lamp	1	500.00	500.00
	Overhead transparency supplies - Film Rolls (re-useable)	10	20.00	200.00
	- Pens for use on acetate Various colors	25	1.00	25.00
	- Transparency film for use in copiers	10 boxes	20.00	200.00
	Kodak Ektographic III E Plus Slide Projector with 90 mm F 2.8 lens with 3 year warranty	1	750.00	750.00

Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
	Apollo Universal Slide Tray for 35 mm slide transparencies - holds 50 slides	3	$ 20.00	$ 60.00
	Bretford Contemporary Mobile Tables 34" and 42"	1 x 34"	165.00	165.00
		1 x 42"	175.00	175.00
	Bretford Video Mobile Table 48" height	1	225.00	225.00
	Luxlor Safety Belt for securing monitor to table	1	40.00	40.00
	Panasonic Video Cassette Recorder c/w remote control unit	1	600.00	600.00
	Panasonic Stereo Monitor/TV Receiver, 25, color c/w remote control unit	1	900.00	900.00
	Estimated Total:			$ 6,590.00
Marketing & Distribution Unit	Office Furniture (standard list) Desk, Chair, Filing Cabinets, Storage Units	1 each	700.00	700.00
	Office and Desk supplies	Various	200.00	200.00
	Heavy Duty Workbench (Locally constructed)	1	300.00	300.00
	Multipurpose Utility Cart Two shelves, castors	2	180.00	360.00

Section 6: Equipment and Furnishings (Cont'd.)
6.2 Equipment and Furnishings Requirements

SERVICE COMPONENT	KINDS OF EQUIPMENT AND FURNISHINGS	QTY.	EST. COST PER UNIT	EXTENDED COST
	Bretford Standard Book Truck w 2 flat shelves, 5" castors	2	$ 250.0	$ 500.00
	Local construction - wooden storage shelves for supplies, paper stick, products awaiting distribution 12" deep x 60" high x 12' long (in 6" modules) attached to the wall	Various	500.00	500.00
	High land Tape Dispenser Table top tape dispenser	1	13.00	13.00
	Pistol Grip for box sealing	1	12.00	12.00
	Scotch Sealing Tape (2" x 60 yds)	10 rolls	7.20	72.00
	Scotch Filament Tape (3/4" x 60yds)	10 rolls	6.30	63.00
	Jiffy Mailing Bags - Air Bubbles Various sizes	50	6.00	300.00
	Pre-printed mailing/shipping labels, imprinted with agency name & address - pressure sensitive, per roll of 500	10	35.00	350.00
	FAX - Panasonic Pro Line Panafax machine with Memory/or equivalent with regular 8 1/2" x 11" plain paper feed (rather than the roll. NB includes TAM interface	1	550.00	550.00
	Estimated Total:			$ 3,920.00

Section 6: Equipment and Furnishings (Cont'd.)
6.3 Space Requirements

SERVICE COMPONENT	KINDS OF SPACE	ESTIMATE OF SQUARE FOOTAGE	
Director	Office	18 x 10 = 180 sq ft	
Support Staff	Secretarial Workstation	10 x 10 = 100 sq ft	
	Storage	8 x 10 = 80 sq. ft	360
Curriculum Development	Office	8 x 10 = 80 sq ft	
	Clerical Support	8 x 10 = 80 sq ft	
	CDS team	8 x 10 x ( ) = 80 sq ft	
	Conference/Workshops	30 x 30 = 900 sq ft	
	Seminars	10 x 12 = 120 sq ft	
	Storage	8 x 10 = 80 sq ft	1320
Materials Ref and Info	Offices		
	Information Space	10 x 12 = 120 sq ft	
	Library Technical Assistant	8 x 10 = 80 sq ft	
	Materials Storage	to be determined	
	Public Service Area	to be determined	
	Public Access	8 X 10 = 80 sq ft	
	Workroom	30 x 12 = 360 sq ft	
	Storage	20 x 12 = 240 sq ft	
	Clerical Support	8 x 10 = 80 sq ft	960+
PEDS Co-ordinator	Office	10 x 12 = 120 sq ft	
	Clerical Support	8 x 10 = 80 sq ft	
Printing	Design & Layout	10 x 12 = 120 sq ft	
	Word Processing	8 x 10 = 80 sq ft	
	Editing & Proof reading	8 x 10 = 80 sq ft	
	Graphics - Office/Workspace	20 x 12 = 240 sq ft	
	Copier & Duplicators	25 x 25 = 500 sq ft	
	Collating	8 x 10 = 80 sq ft	
	Binding	8 x 10 = 80 sq ft	
	Distribution	8 x 10 = 80 sq ft	
	Storage	10 x 20 = 200 sq ft	
	Clerical Support	8 x 10 = 80 sq ft	
	Laminating	8 x 10 = 80 sq ft	
	Photography	10 x 12 = 120 sq ft	1940

Section 6: Equipment and Furnishings (Cont'd.)
6.3 Space Requirements

SERVICE COMPONENT	KINDS OF SPACE	ESTIMATE OF SQUARE FOOT	
Audio	Office	8 x 10 = 80 sq ft	
	Equipment & supplies storage and Dubbing Unit	10 x 12 = 120 sq ft	
	Taping area e.g. sound booth	10 X 12 = 120 sq ft	320
Video	Office	8 x 10 = 80 sq ft	
	Dubbing	10 x 12 = 120 sq ft	
	Equipment & supplies storage	10 x 12 - 120 sq ft	320
	Design & Layout	To be determined	
	Production studio	To be determined	
Computer Software	Office	8 x 10 = 80 sq ft	
	Materials evaluation & testing	10 x 12 = 120 sq ft	
	Demonstration Space & Lab	25 x 25 = 500 sq ft	700
Equipment Repair and Maintenance	Office	8 x 10 = 80 sq ft	
	Clerical Support	8 x 10 = 80 sq ft	
	Work Bench	8 x 10 = 80 sq ft	
	Repair Storage	18 x 10 = 180 sq ft	
	Equipment Circulation	18 x 10 = 180 sq ft	
	Equipment Storage	20 x 12 = 240 sq ft	840
Marketing and Distribution	Office	10 x 12 = 120 sq ft	
	Clerical Support	8 x 10 = 80 sq ft	
	PR Storage	8 x 10 = 80 sq ft	
	Receiving	8 x 10 = 80 sq ft	
	Packaging	10 x 12 = 120 sq ft	
	Shipping	10 x 12 = 120 sq dt	
	Storage	12 x 20 = 240 sq ft	840

Section 6: Equipment and Furnishings (Cont'd.)
6.3 Space Requirements

SERVICE COMPONENT	KINDS OF SPACE	ESTIMATE OF SQUARE FOOT	
Reception	Receptionist	8 x 10 = 80 sq ft	
	Waiting Area	8 x 10 = 80 sq ft	160
Custodial	Storage	10 x 12 = 120 sq ft	
	Office	8 x 7.5 = 60 sq ft	180
Staff Room	Lounge	18 x 10 = 180 sq ft	
	Kitchenette	8 x 10 = 80 sq ft	260
Parking	Employees		
	Visitors		
	Estimated Total:		8200 sq ft.

Section 7: FUNDING AND COST FACTORS

In Section 2.2.5, Interviewee Perceptions respecting Financing and Sustainability of CAMPAEC, there is clear evidence that all the respondents expected that the Regional Centre needed start up capital investment of a substantial nature. It was also indicated that there were clear expectations that the local governments would accept some of the long range operational costs, whether in kind, in services, or as a sub-inventions.

To some degree it is difficult in this report to indicate precise cost factors. For example, the final definition of salaries cannot be taken at this time, especially for the Management and Professional level personnel. Respondents were very clear in their indication that salaries should be high enough to draw quality personnel with both training and expertise from their current positions, while still retaining their own career path after the contract at the Regional Centre might be completed. Similarly, decisions with respect to space and facility development will have an impact on the final cost factors: Will an existing building be renovated; ... a new one constructed; will land be donated; etc. These decisions will impact on the amount of caplital expenditures to be sought externally.

1. SPACE REQUIREMENTS

With respect to space, the estimated requirements have been detailed in Section 6.3 according to the various service components. This project report has been written with the inclusion of all three components: Curriculum Development Unit, Materials Reference and Information Unit, and Production Equipment and Distribution Services Unit as integrated working

Section 7: Funding and Cost Factors (Cont'd.)

units. If the decision is made to establish them separately, then space allocations would be different.

1.0 Director and Support Staff — approx 360 sq ft

1.1. Curriculum Development Unit — approx. 1320 sq ft

For the Curriculum Development area, the space variations would change depending upon the number of curriculum support team members that are assigned to staff at any one time. It is very important that these staff members have appropriate working environments.

1.2 Materials Reference and Information Unit

Collections & Public Access included — approx. 5960 sq. ft.

Collections & Public Access separate — approx. 960 sq. ft.

For the Materials Reference and Information Unit, the question of whether this unit will house all the materials itself, or if some arrangement could be made with other existing libraries in the immediate area to actually house the resources and provide the public use/access space. (e.g. A Teacher Training College; A Community College; etc) There is sound logic in negotiating this type of space and access rather than duplicating the collections. At the same time, the Information Specialist must have clearly identified quarters and responsibilities. These must be in close proximity to the other two Units.

Section 7: Funding and Cost Factors (Cont'd.)

The impact of modern electronic technology in information storage and retrieval implies a careful examination of these issues. Having said that, the costs for such networking and document delivery services must be carefully addressed in a separate study.

1.3. Production, Equipment and Distribution Services Unit

approx. 4960 sq. ft.

While some of these services will not come on line immediately, it is important that space be allocated for them at the initial developmental stages. Depending on the results of "Feasibility Studies" suggested in each section respecting negotiations with public sector service delivery via radio stations and local cable networks, the space requirements could eventually change substantially. It is the opinion of this researcher that the costs to develop technologically up-to-date studios for production in these two fields is prohibitively expensive at this time. Instead the preliminary roles described in Section 5.3 take the service in an alternative direction.

1.4. Other considerations

1.4.1 Receptionist area and public waiting areas — approx. 160 sq. ft.

1.4.2 Custodial services — approx. 180 sq. ft.

1.4.3 Staff room, lounge and kitchenette — approx. 260 sq. ft.

1.4.4 Parking to accommodate approximately 30 vehicles, with additional access to the building for delivery vehicles

1.4.5 Aspects of the Sectional 6.2 General Considerations will require attention in the equipment and maintenance functions of the building in addition to those noted above.

Section 7: Funding and Cost Factors

Estimated total occupiable floor space: 8,200 sq. ft.

In keeping with comments above, it is not possible to place a cost value estimate on this item at this time.

2. EQUIPMENT AND FACILITIES REQUIREMENTS

Section 6.2 has endeavoured to tabulate the costs for the basic equipment, furnishings and facilities needed to put this project into place. All prices quoted here are in Canadian dollars, unless otherwise indicated. All prices are approximate and subject to change according to time factors and locations where the quotations may be made. In some aspects, a tendering system could be used to obtain a better price, so long as the criteria for quality of product and service contracts are clearly detailed. In some cases on-island prices will be better; in others, off-island quotes will be better even when the shipping and installation charges are included. Discretion must be given to the Director to make these decisions.

Again, number and location of staff and collections will make a difference in the final totals, for example, the number of subject specialists.

Section 7: Funding and Cost Factors (Cont'd.)

2 Equipment and Facilities Requirements (Cont'd.)

2.0 Director and Staff .....approx .....$ 42,390.00

2.1 Curriculum Development Unit.....6,380.00

2.2 Materials Reference & Information Unit.....67,000.00

2.3 Production, Equipment & Distribution Unit

.1 Coordinator.....1,660.00

.2 Printing and Reprographics Services.....271,781.00

.3 Graphics Services.....5,365.00

.4 Audio Services.....2,100.00

.5 Video Services.....5,600.00

.6 Computer Software Services 1,250.00

.7 Equipment Repair & Maintenance Service.....6,590.00

.8 Marketing and Distribution Services 3,920.00

2.4 Custodial, Grounds and Maintenance of Plant Services.....

Estimated Total: .....$ 414,036.00 Can $

3. STAFFING REQUIREMENTS

The determination of salaries is not possible at this time. Management decisions respecting the final organization, and relative reporting and job responsibilities will influence the value placed on each position for salary and benefits. Initial staffing components are outlined in Section 5, Staffing Considerations, and are further accented in the Section 8, Implementation Stages.

It has been stated previously that this is the most important aspect of the operation. Well selected staff, with a strong sense of commitment to

Section 7: Funding and Cost Factors (Cont'd.)

3. Staffing Requirements (Cont'd.)

education, business dynamics and human relations will make this project a strong force in educational change on all the islands.

3.0	Director & Secretarial Support approx.	$ 45,000.00
3.1	Curriculum Development Unit	30,000.00
3.2	Materials Reference & Information Unit	45,000.00
3.3	Production, Equipment & Distribution Unit	170,000.00
3.4	Custodial and Plant Maintenance Services	10,000.00
3.5	Staff Training (In-house & external)	100,000.00
	Total estimated costs	$ 400,000.00

It is expected that these would be continuing costs for each year of the operation, and would change according to changes in programme needs and as local or regional salary schedules are in effect.

VIABILITY

Throughout the interviewing process, efforts were made to determine the scope of the production needs. It was clearly evident that there are substantial needs for print resources, audio and video productions and electronic format materials across the whole sub -region. However, the quanities required were unclear. Some efforts have been made to identify these figures for future consideration.

In consultation with the OCOD Regional Office, it was noted that printing production quotes were solicited for the 1993 year. At that time all estimates were based on 8 1/2 x 11 " white paper. Modules were planned in English (x 23); Mathematics (x 30), Social Studies (x 33) and Integrated Science (x 37).

Section 7: Funding and Cost Factors (Cont'd.)

Lower limits of 600 copies and upper limits of 1500 copies of these 123 projected modules, with varying paginations, were specified in the quotations. Using these as the base finished product numbers (x) the number of modules, (x) the number of pages per module, an approximate total number of pages were estimated at:

Subject	Lower Limit	Upper Limit
English	843,000.	2,109,000
Mathematics	1,632,600	4,081,500
Integrated Science	1,345,200	3,363,000
Social Studies	1,253,400	3,133,500
Totals	5,074,200	12,687,000

In addition to the actual printing of the contents sections, cover stock, collating, binding or padding according to specifications were also designated in the tender. It is understood that the companies in St. Lucia which were asked to bid on these quantities and specifications, noted that they were not prepared to handle jobs in such quantities. OCOD costed out the same specifications in Canada, and realized that considerable savings could be achieved by having the work done in Canada, and having the product landed in the St. Lucia Regional Office.

There seem to be three factors which were at work here:

1. the availability of paper stock at a reasonable cost, and in the quantity and quality (in good condition) when it is needed

2. access to high speed duplicator, collating and binding equipment that is well maintained and efficiently operated
3. expertise in the management of large quantity printing services with short turn around times.

Paper supplies and suppliers

Each of these matters needs to be addressed. Research indicates that the costs of landed paper in St. Lucia (and probably the same factor applies in the other islands) is high. Estimates for a carton of 5000 sheets, 20 lb. bond, white only, range from:

$ 125.00 EC (2.5 cents EC or 1.45 cents CAN per sheet) to

$ 160.00 EC depending on the supplier. In addition, it is understood that OCOD was able to negotiate a duty free status on their pricing for paper in St. Lucia.

Centres which do printing of this nature and quantity for school systems in Manitoba were visited to collect relevant data. One of the Centres uses high speed duplicators and offset presses to produce in excess of 10 million imprints per year. They bind their materials in patterns that are similar to the OCOD publications, using color covers and staples or plastic binding. The pricing structure used in that District Centre to charge back costs to the various schools or agencies is for paper, supplies, machine depreciation, etc. The manager in this centre decided to purchase the equipment outright, and hence the depreciation figure in the calculation of costs to the customer. They charge 1.75 cents per page or $ 17.50 per

thousand. This system does not charge for staff time. There are two experienced operators in the printing unit.

Another Manitoba District Centre offering similar services on a smaller scale produced approximately 3.5 million copies in 1993. The manager chooses to lease the high speed electrostatic copier and duplicating equipment, and the pro-rated leasing costs are included in the amount charged back to the client. There is only one staff member in this unit. In their pricing structure, they charge back to the school or agency a printing charge of 1.5 cents per copy (or $ 15.00 per thousand) plus the paper stock costs. Their price for 8 1/2 x 11 paper white is $ 6.00 per thousand or .6 cent per sheet; and for coloured paper is $ 8.00 per thousand or .8 cent per sheet. Thus the charge would be approximately 2.1 cents CAN per sheet to their schools. There is only one operator in this Unit.

Both the above Centres feel that they are able to provide 48 hour turn around time on most jobs that are generated by their schools or curriculum consultants so long as the originals are in camera-ready copy format.

A quality Manitoba printing and duplicating company was contacted to ascertain their printing rates. They include all costs for paper, supplies, equipment, staff and overhead. Their rate is 6 cents CAN per sheet for under one hundred copies, 3 cents per sheet (or $ 30.00 per thousand copies), and negotiated rates after that amount are available. This company uses both high speed electrostatic copiers and off set duplicators as the quantity and time factors dictate. It is believed that OCOD may use this supplier for some of its work, especially when speedy turn around time is required.

Section 7: Funding and Cost Factors (Cont'd.)

An international paper supplier was contacted in Winnipeg and then in Montreal to ascertain price quotes. Since they currently have service agreements with CARICOM, they were reluctant to provide quotes for this study. In addition, they advised that the pricing structures for paper are in such an incredible state of flux that they do not quote to Canadian customers without confirmed orders for periods longer than three (3) months.

The Xerox Corporation in collaboration with the J.E. Bergasse & Co. Ltd. in St. Lucia quoted on 20 million sheets of Xerox 4024 DP of 8 1/2 X 11 paper at $3.41 US per ream of 500 sheets. This could be equated at $6.82 US per thousand (or .7 cents per sheet). In comparable Canadian funds this would be about 1 cent per sheet. This rate compares favorably with the figures noted above, and merits close consideration. One could conclude that with quality equipment and efficient workflow, local printing can be an economically viable situation.

High Speed Duplicating Equipment.

None of the sites visited in the Sub-Region gave evidence of high speed quality duplicators or copy machines. In at least two cases the machines which should have been used had been broken for some considerable time. In another case, a small duplicator was being used with some considerable inefficiency in time for both operators and manual collators. In yet another case, the small photocopiers on site where broken from overheating, and the secretary had to use the FAX machine to make copies of working documents for the researchers. Another instance showed a staff member trying to do a "long run of about 100 copies" on a small table top office type copier which was regularly overheating and breaking down. It seems clear that there is

urgent need for good quality high speed photocopier and offset duplicating services on all the islands, as well as centrally at one larger regional centre.

Along with this concern is the severe need for trained maintenance personnel to see that the machines are kept in good working order through a regular preventative maintenance programme. With appropriate negotiation, this training can be provided as part of the initial purchase or rental agreements, and can be done on the island at the time of installation, or at the manufacturer's training centre. The individual would then be able (1) to assist some of the smaller national Teacher Resource Centre managers in selecting their copying and duplicating equipment appropriate to their local needs, (2) to train a local key operator to do simple maintenance and repairs, and (3) to do regular maintenance work around the islands. This would save considerable dollars in staff "down time" in most centres. (4) It might even be possible to contract out some of this person's time as a repair services technician to other agencies for a fee.

A cost quotation for high speed electrostatic copying and duplicating equipment has been obtained from Xerox Corporation. It indicates that the equipment can be purchased or leased. It is recommended that a lease agreement be used for at least the first two (2) years of the project to get the system up and running quickly. After that time the Director would be in a position to recommend that a lease-to-own, or direct purchase agreement could be more advantageous. It would also give more time for the local maintenance trainee to get to know the various aspects of the equipment.

With respect to other aspects of production, one should also note that there is a recommendation to lease a colour laser printer from Xerox (or equivalent companies). This is presented as an option to provide some

aspects of colour printing in the various primary documents which would be developed. Experience in Manitoba in District Teacher Centres indicates that while this does not provide full colour capabilities throughout the whole book, it does meet some special needs, and can be a step in reaching quality module production. It is of importance to note that one Manitoba Centre has leased this equipment, and can produce the copies at 30 cents per sheet as compared to rates of up to $ 2.25 per copy in the commercial market area.

Production Expertise

In the area of curriculum development and media production, it is important to develop a pool of trained and experienced professional and technician personnel. The areas of printing, audio, video and computer software adaptation or development each require specialized training. It is highly unlikely that one will find all of these skills and experiences in one or two staff members. Therefore, the Regional Centre Director will need to select staff who have unique skills, who show strong aptitude for learning in technical areas, and who have the fine sense of creativity coupled with business management attitudes. From the interviews, it is apparent that there is an urgent need for personnel in all these areas (1) to help teachers adapt to new methodologies, (2) to introduce and monitor new and practical technologies, and (3) to capture the imagination of young people about learning how to learn for themselves.

The Regional Centre has a responsibility to train personnel working in parallel technical areas at the National Teacher Resource Centres who in turn will work with the teachers and administrators in each of the territories. This

is a commodity that cannot be costed out in dollars. It is a long range investment in society.

Elsewhere in this document there are costing estimates for the equipment, facilities and space for this proposed operation. With the above information in mind, the following observations on viability and sustainability may be drawn:

1. There is an urgent need for printing services on all the island in the region. The figures quoted above barely begin to touch the surface of a massive iceberg. If teachers have access to resources, they can be led to alter their teaching strategies to respond to the various learning styles of their individual students.
2. If the service requirements identified above were handled by a Regional Centre, there would be:
   - jobs created in the sub-region (e.g. at least twenty proposed in Section 5.4 Staffing Grid,
   - income would be re-invested in the sub-region, rather than used in another country,
   - a pool of trained personnel, both professional and technical would be made available across the sub-region,
   - public sector businesses would benefit from the distribution and sale of raw materials for the various types of new productions,
   - materials unique to the cultural and historical background of the nations would be available for commercial sale, as well as at cost rate to schools and students,

Section 7: Funding and Cost Factors (Cont'd.)

- based on the printing services alone, a Regional Centre efficiently set up and operating could produce material at a very economical rate, by comparison using the Canadian rates quoted.

e.g. 12 million copies at 1.75 cents per sheet would
work out at about ..... $ 210,000
vs 3.00 cents commercially ..... $ 360,000
or a saving of ..... $ 240,000 (Can)
(an amount equal to staff salaries for one year ?)

e.g. paper costs per thousand

white 8 1/2 x 11	St. Lucia at	$ 145.00
	Canada at	6.00
	Xerox in St. Lucia	9.50
coloured 8 1/2 x 11	Canada at	8.00

The tabulations in this section have not addressed the possibility expressed by many leaders in the territories about the printing of administrative materials, testing tools, reports, publicity materials, and many other types of documents which would be useful across the sub-region or nationally. It is apparent that a speedy service that produces high quality finished products (even if only in black and white) would be very valuable. Much of the existing locally-produced material is printed badly. This distracts from the quality of the content, and does not encourage readership, creative response, or incentives to perform well. Beginning to reverse these negative dynamics could be the greatest advantage of such a service.

All interviewees confirmed that they believed such a centre once established with external funding could be made self-sustaining. It was noted quite often that the Director must make a commitment to work toward this goal. All participants in the interview process indicated their willingness

Section 7: Funding and Cost Factors (Cont'd.)

(1) to support the Centre, (2) to work to have materials produced which are high quality, (3) which are required for use in the schools, (4) and which are relevant to the changing needs of the sub-region in the global community. The Centre is expected to reduce the cost pressures on many families. When the figures quoted above are converted into real productions for use in schools, then parents will realize the better return on their investments. They may be willing to spend the same amounts for better quality goods, and for the better standard of student graduates as a result.

SECTION 8. IMPLEMENTATION PHASES AND STAGES

A plan of action for implementing recommendations of the study is important if the operation is going to get up and running quickly. The following outline suggests a sequence which could be used.

In this plan, the first stage (which may or may not be one year), there are two sections. Phase 1A acknowledges that the decisions to set up the centre, to fund it, and to establish the management framework are priority. Other parallel operations can be quickly put in place once these initial decisions have been made. The mechanics of setting up the operation must be carefully addressed, and speedily accomplished so that the supporters will see some return for their input. At the same time, steady development is more to be desired than impulsive moves which may have to be reversed later.

Phase 1B addresses the placement of support services within the operation, and in particular the support team - professional, technical and clerical. At the same time as facilities, equipment and space must be addressed, the Director must also be addressing the scope of services. Publicity about the Centre, its role, functions and services need to be designed and distributed early in this phase.

Phase 2 (probably year 2) emphasizes the programme of curriculum, materials information and production services, and the relationships with the clients, national Teacher Resource Centre, Advisory Committees, and related agencies. This is the year that will show the centre as an important information and change agent. New productions will be expected. New services will need to be implemented to network with the clients.

Stage 3 is designed to continue the development work of stage 2.

Section 8 Implementation Phases and Stages (Cont'd.)

However, it also has a component of formal evaluation built in which reminds the Director and staff that the Centre must be client responsive as well as financially viable. This is the year that the Centre will become more self-sustaining if the management and consultative work has been properly carried out.

Stage 4 will grow out of the documentation provided in stage 3 as the processes of Management by Objective, and long range planning are put into place. The centre must be a dynamic and growing agent responsive to the changes and needs in the sub-region.

Component	Phase 1A	Cost	Phase 1B	Cost
Director	1. Finalization of Policy by Ministers of Education 2. Advertise position by CERU Director. 3. Appointment 4. Develop Centre Objectives 5. Develop Plan of Action 6. Supervise building or refurbishment 7. Order and supervise delivery of basic equipment and supplies 8. Initiate procedures for other professional appointments. 9. Initiate Management Committee and meet.	1 salary	1 Develop unit objectives with Professional team 2. Develop Plan of Action with Professional Team. 3. Implement Phase I of Centre Plan of Action	
Support Staff	1. Advertise and appoint Secretary to Director of Learning Services	1 salary		

Component	Phase 1A	Cost	Phase 1B	Cost
Professional Staff:				
Curriculum Development Specialist	1. Advertise and appoint within the first 3 months	2/3 salary	1. Draft unit objectives 2. Draft Plan of Action 3. Initiate meetings with National CDU personnel to set parameters and priorities. 4. Make recommendations for additional professional support team appointments	
Material Resources and Information Services Staff	1. Advertise and appoint parallel to Curriculum Development Specialist	2/3 salary	1. Draft unit objectives 2. Draft Plan of Action 3. Draft plans for space utilization 4. Make recommendations for additional professional support team appointments 5. Begin systematically collecting National documents	

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Component	Phase 1A	Cost	Phase 1B	Cost
Professional Staff:				
Production Manager	1. Advertise and appoint parallel to Curriculum Development Specialist and Material Resources and Information Services Staff.	2/3 salary	1. Draft unit objectives 2. Draft Plan of Action 3. Set up equipment to begin/-meet immediate printing needs. 4. Make recommendations for additional professional support team appointments	

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Component	Phase 1A	Cost	Phase 1B	Cost
TECHNICAL STAFF				
Library Technician			1. Advertise and hire within 6 months. 2. Establish workstation. 3. Organize systematic acquisition and processing workflow. 4. Follow IS work priorities	1/2 salary
Graphics Artist			1. Advertise and hire within 6 month of opening 2. Establish work station 3. Design Centre materials and promotion 4. Assist Curriculum Development Specialist in establishing priorities. 5. Assist Material Resources and Information Services in locating national materials.	1/2 salary
Printer			1. Advertise and hire within 6 months of opening. 2. Establish workflow 3. Develop production priorities 4. Ensure steady printing flow	1/2 salary
Collater			1. Advertise and hire within 6 months of opening 2. Follow workflow procedures	1/2 salary

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Component	Phase 1A	Cost	Phase 1B	Cost
TECHNICAL STAFF - Audio, - Video, - Computer - Equipment Repair & Maintenance			1. Advertise and hire within 6 month of opening 2. Establish work station 3. Assist in locating, collecting and evaluation National resources with Curriculum Development Specialist and Material Resources and Information Services	Equivalent of one full salary $700 each
Marketing	1. Responsibility covered by Director.		1. Advertise and hire within 6 months of opening. 2. Draft unit objectives with Director. 3. Implement Plan of Action 4. Establish distribution workflow. 5. Establish workstation.	1/2 salary $700
Distribution	Hire part-time/ [otherwise covered by Receptionist and Sec.]	1/2 salary	1. Establish delivery procedures 2. Assist in setting up workstations 3. Follows workflow procedures	1/2 salary
Reception	1. Advertise and hire staff 2. Establish temporary workstation 3. Work closely with Secretary	1 salary $300	1. Establish permanent workstation 2. Institute full reception routines 3. Assist Director's Secretary and Marketing Supervisor.	$400 1 salary

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Component	Phase 1A	Cost	Phase 1B	Cost
FACILITIES:	1. Provide temporary office space for Director and Secretary 2. Prepare requisitions and develop plans for pemanent space.		1. Establish permanent quarters 2. Acitivate all workstations 3. Outfit all offices and auxiliary rooms 4. Follow-up on delayed shipments, defects, etc. 5. Evaluate adequacy of quarters, safety, and enviornmental factors	
Equipment and Furnishings	1. Provide basic office start-up resources: desks, fax, phones, computers, copiers 2. Arrange for staffroom facilities.		1. Complete acquisition of equipment 2. Initiate orientation and training programs as recommended 3. Complete computer network system 4. Complete repairs as necessary 5. Compile warranties, and acquisition records for inventory	
Supplies	1. Acquire initial office supplies.		1. Acquire basic and supplementary supplies for all programs in Centre 2. Develop inventory procedures 3. Develop cost of service profiles	

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Component	Phase 1A	Cost	Phase 1B	Cost
Program of Services	1. Draft working paper on Project objectives and Plan of Action 2. Prepare draft advertisement for Production Manager and Technical Staff.		1 Review Objectives and Plans by year end, to establish program for following year 2. Review all job descriptions and complete staff evaluations 3. Critique all work flow processes for efficiency 4. Obtain user feedback on visibility and quality of service 5. Prepare and distribute annual report to client groups.	

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Component	Phase 2	Cost	Phase 3	Cost
	Recommendations from Phase 1B should be repeated as appropriate for all components			
Director	1. Review all year 1A and 1B Objectives by unit and staff member; and prepare written summary 2. Prioritize needs for Year II, with staff and Management Committee 3. State needs in measurable objectives 4. Develop Plan of Action to meet objectives, with time lines 5. Develop budget to meet needs 6. Clarify unit goals and time lines with all staff in a collaborative management style. 7. Publicize the goals and services for the second year widely		1 Conduct a thorough internal review of programme objectives, unit goals and operational procedures. (within first 6 months). 2. Initiate a procedure to have a formal programme review, inventory audit and financial audit completed by an external agent, with the report presented to the Management Committee by the tenth month of the year. 3. Prepare a three-year plan for development with OERU Director for review by the proper authorities 4. Follow other aspects of the original job description as prioritized with the OERU Director.	

Component	Phase 2	Cost	Phase 3	Cost
Director	8. Solicit both client and staff feedback on an open, and regular basis 9. Ensure that mechanisms are in place for regular programme and personnel evaluation; inventory and financial audits; and other procedures of efficient operation. 10. Keep the OERU well informed on successes and progress towards sustainability.		5. Solicit both client and staff feedback on an open, and regular basis. 6. Keep the OERU well informed on successes and progress towards sustainability.	
Support Staff	1. Completes assignments to the Director promptly and efficiently. 2. Maintains all historical documentation for the programme for the Director's files 3. Secretarial work as needed in the unit.			

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Component	Phase 2	Cost	Phase 3	Cost
Professional Staff CDS	1. Continue to prioritize programme and curricular reviews with National Advisory groups and the director 2. Develop annual programme goals, within the framework and time lines of the whole Centre's operation 3. Complete revision of specific modules ready for re-production and distribution 4. Complete new documents, specific modules or other programme material for production and distribution 5. Arrange for contracting appropriate professional assistance as needed. 6. All regular aspects of the original job description as prioritized with the Director.		1. Continue to prioritize programme and curricular reviews with National Advisory groups and the director to establish a long-range writing, development, implementation and assessment programme. 2. Develop annual programme goals, within the framework and time lines of the whole Centre's operation 3. Complete revision of specific modules ready for re-production and distribution 4. Complete new documents, specific modules or other programme material for production and distribution, with particular attention to non-print and electronic formats 5. Arrange for contracting appropriate professional assistance as needed. 6. All regular aspects of the original job description as prioritized with the Director.	

Component	Phase 2	Cost	Phase 3	Cost
Professional Staff MRISS	1. Continue to prioritize programme and curricular reviews with National Advisory groups and the director 2. Develop annual programme goals, within the frame-work and time lines of the whole Centre's operation 3. Actively promote elect-ronic network services and document delivery services 4. Complete new documents, specific modules or other programme material for production and distribution		1. All regualr aspects of the orginal job description as prioritized with the Director 2. Strong emphasis on materials utilization with classroom teachers, in all formats, through speedy document delivery. 3. Work closely with National leaders in library and inform-ation service networks, and especially in the promotion of school/community library programmes. 4. Undertake outreach programmes, under the Director's supervision, to obtain resources, subscriptions, equipment and funds for specific projects.	
PEDS Co-ordinator	1. Continue to prioritize programme and curricular reviews with National Advisory groups and the director			

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Section 9 Summary and Recommendations

This paper has been prepared based upon a wide range of interviews with educational leaders in the various islands, a review of pertinent background and working papers, and an analysis of relevant data. It attempts to summarize the findings, and to propose plans of action for further consideration. All aspects of the feasibility of implementation have been addressed including objectives, relationships to other information provider agencies/centres, management structure, staffing, equipment and facilities, finance and other related matters. The implementation of such a regional project under the OECS Education Reform Strategy would provide a mechanism for addressing the issues of curriculum development, information management, materials production and equipment services. Such a service in collaboration with counterpart national agencies and training programs will provide a significant impetus to modernize education in the region.

For the sub-region to develop, it is imperative that students, adult learners, and teachers have economical access to the most appropriate teaching and learning resources to meet their needs. An educated and informed community can more effectively resolve the various challenges facing it.

RECOMMENDATIONS:

1. That the OECS Secretariat be encouraged to endorse and support this project-

   and that implementation begin as soon as the parameters of funding and location can be confirmed.

2. That wherever the Regional Centre is located, consideration should also be given to the allocation of other Educational Reform Projects in different member territories.
3. That staff be appointed on contract, subject to renewal based on performance review.
4. That initiative be taken by Management to ensure that pension rights and other civil service benefits and career paths be safeguarded for personnel contracted or seconded to the regional unit.
5. That personnel be recruited from across the region according to their expertise and experience
6. That opportunities for staff upgrading and training within the unit, regional and internationally be planned and budgeted annually.
7. That there should be a formal programme and staff review of the total project at the end of each three year period, preferably by an external body or agency.
8. That there be on-going formative evaluation to ascertain that the regional centre is fulfilling its objectives and reaching the most relevant needs of the sub-region.
9. That there be clear procedures for accountability in all units for financial and inventory matters, subject to an annual independent audit.
10. That there be flexibility to negotiate procurement rights to obtain goods and services at the best possible price within the best time frames appropriate to the needs of the unit.
11. That there be periodic review of the composition, role and functions of the Management Committee, and also of all Advisory Committees

12. That input and feedback be sought on a regular basis from the client user groups, and that this information be carefully taken into account in the planning of new materials.
13. That the maintenance and insurance of the building and its contents be undertaken by the OECS Secretariat .
14. That initiatives be undertaken by the OECS Secretariate through the Council of Ministers of Education to access grants, through relevant funding bodies such as AFGUND, CIDA, UNESCO, OAS, USAID, CFTC, and other appropriate bodies.
15. That finances be sought from the National Governments for commitments of subventions for a regional grant to the support of the unit.
16. That the management should give an undertaking that in as much as is possible, the unit will be financially self-sustaining after the first three years of operation.
17. That the professional integrity and autonomy of the unit will be maintained at all times.

Section 10

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Appendix 1

LIST OF PERSONS INTERVIEWED BY TERRITORY

Antigua:

Mrs. Eusalyn Lewis	Permanent Secretary
Mrs. Evelyn Sheppard	Chief Education Officer
Mr. Whitfield Harris	Education Advisor
Ms. Violet Lewis	Senior Education Officer (Secondary School)
Mr. Edgar Davis	Curriculum Development Officer, including Teaching Resource Centre
Mr. Alford. Alexander	Industrial Art, Supervisor/TecVoc Education
Ms Gloria Samuels	Education Officer (Primary Schools)
Ms. Jean Edwards	Home Economics Supervisor
Ms. Marie Browne	Supervisor of Art
Ms. Sheila King	Handicraft Supervisor
Ms. Michael Francis	Co-ordinator of Mathematics
Mr. Earl Skerrit	Science Co-ordinator

Dominica

Honourable Rupert Sorhaindo	Minister of Education and Sports
Mr. Anthony Lockhart	Chief Education Officer
Mr. Rupert Lance	Education Officer Curriculum
Ms. Frances Harris	Principal, Teachers Training College
Ms Sorenette Bruney	Assistant Education Officer - Family Life Education
Ms. Nisbertha Buffong	Specialist Teacher, Acting, Curriculum Development Unit
Ms. Cecillia Benjamin	Secretary

Grenada:

Ms. Cynthia Horsford	Permanent Secretary
Mr. Leland Jones	Chief Education Officer
Mr. Anthony Alexander	Education Officer
Mr. Justin Benjamin	Officer, in Curriculum Development
Ms. Cheryl Sylvester	Grenada National College, Librarian

List of Persons Interviewed by Territory (Cont'd.)

Montserrat

Hon. Lazelle Howes	Minister of Education, Health and Community Services
Mr. Joseph Daniel	Permanent Secretary, Education
Ms. Oeslyn Jemmotte	Director of Education
Ms. Grace White	Curriculum Co-ordinator
Ms. Lucy Fenton	Principal, Montserrat Secondary School
Mr. Paul Payne	Principal, Montserrat Technical College
Mr. Alrick Taylor	Education Officer

St. Kitts and Nevis

Hon. Sidney Morris	Deputy Prime Minster, Minister of Education, Youth and Community Affairs
Ms. Lorna Callendar	Permanent Secretary, Education
Miss Gwenneth Hanley	Head, Division of Teacher Education
Mr. Roosevelt Morris	Education Officer
Ms. Vaple Burt	Education Officer, Curriculum Development

St. Lucia:

Mr. Rufus Khodra	Principal Assistant Secretary
Mr. Gaspard Charlemange	Acting Chief Education Officer
Ms. Lucius Doxerie	Audio Visual Specialist, CAMDU
Mr. Aldrek Mondesir	Co-ordinator, CAMDU
Ms. Joan Hyancinth	Graphic Artist, CAMDU
Ms. Gene Walters	OCOD Office, St. Lucia

St. Vincent and the Grenadines

Mr. Theolophilus Shallow	Permanent Secretary, Ministry of Education
Mr. Macaulay Peters	Chief Education Officer
Mr. Cools Van Loo	Education Officer, Planning
Mr. Stanley Campbell	Deputy Chief Education Officer
Ms. Monica Huggins	Principal, Technical College

Appendix 2

Comparative Demographic Data

	Antigua/ Barbuda	British Virgin Islands	Dominica	Grenada	Montserrat	St. Kitts Nevis	St. Lucia	St Vincent/ Grenadines	Totals
Population	84,600		21,300	95,00	12,000	45,000	136,000	113,000	
Area Sp. Mi	171	32	290	133	32	101	238	150	
Schools:									
Preprimary	35	7	70	75	14	40	150	75	466
Primary	43	20	66	77	12	31	88	66	403
Secondary	12	6	13	19	2	8	16	21	97
Enrolment									
Preprimary	1800	330	3,000	4,218	471	1,384	7,200	2,500	20,903
Primary	10,963	2,595	14,920	22,423	1,548	6,912	32,290	24,134	115,787
Secondary	4,378	1,205	4,536	7,183	860	4,720	9,866	7,174	39,922
Staffing -Pri.									
Total	417	107	608	831	74	342	1,176	1,215	4,770
No. Trained	319	95	294	405	40	250	727	371	2,501
U. Grads	7	45	0	0	2	30	1	0	85
Staffing-Sec.									
Total	302	86	258	365	70	302	466	408	2.267
No. Trained	193	77	67	113	30	189	355	120	1.144
U. Grads	120	76	70	155	29	113	180	132	875
Budget. Data									
Total: Education	30.5	14.5	24.7	32.3	8	14.0	55.0	32.8	5.686
TotalGovernment	283.72	147	145.7	169.7	42.4	111.1	263.5	169.6	465
Tertiary Edn.									
Enrolment	692	54	493	780	201	1,433	1,455	578	1.525
Staffing	85		56	66	13	40	140	65	584
"A" Level	212		276	323	40	133	329	212	1.761
T. Ed.	45	10	63	89	24	37	154	162	
TVET.	413		201	310	93	279	319	146	

Source: OECS Education Reform Strategy. Sept. 1993

Appendix 3

Comparative Data on Schools Reporting
Without the following Equipment or Facility

	Antigua/ Barbuda	British Virgin Islands	Dominica	Grenada	Montserrat	St. Kitts Nevis	St. Lucia	St Vincent/ Grenadines	Totals
Total Schools									
Primary	78	27	136	152	26	71	238	141	869
Secondary	12	6	13	19	2	8	16	21	97
Typewriters									
Primary	23	15	39	40	10	20	48	21	
Secondary	0	0	0	0	0	0	3	-	
Photocopier									
Primary	29	0	53	48	10	18	76	64	
Secondary	7	0	0	6	1	4	7	16	
Library									
Primary	23	2	42	52	0	17	51	-	
Secondary	0	1	5	0	0	2	0	7	
Duplicator									
Primary	22	0	36	46	12	17	25	14	
Secondary	2	-	0	0	0	1	2	0	
Computer-Adm.									
Primary	27	0	63	54	12	27	-	66	
Secondary	7	0	13	0	-	3	-	20	
Computer-Lab.									
Primary	29	17	64	-	-	27	-	66	
Secondary	8	2	14		-	4	-		

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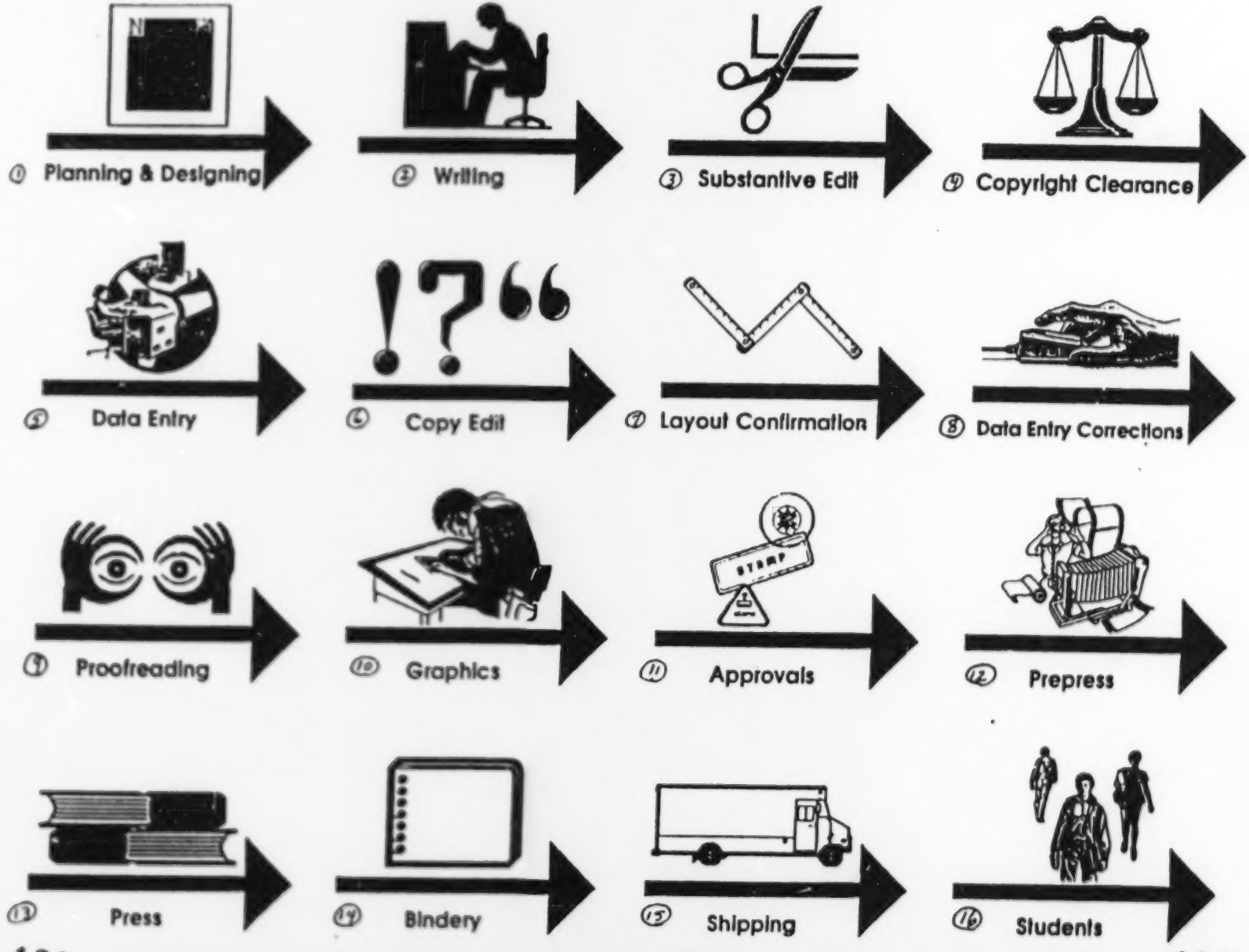

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